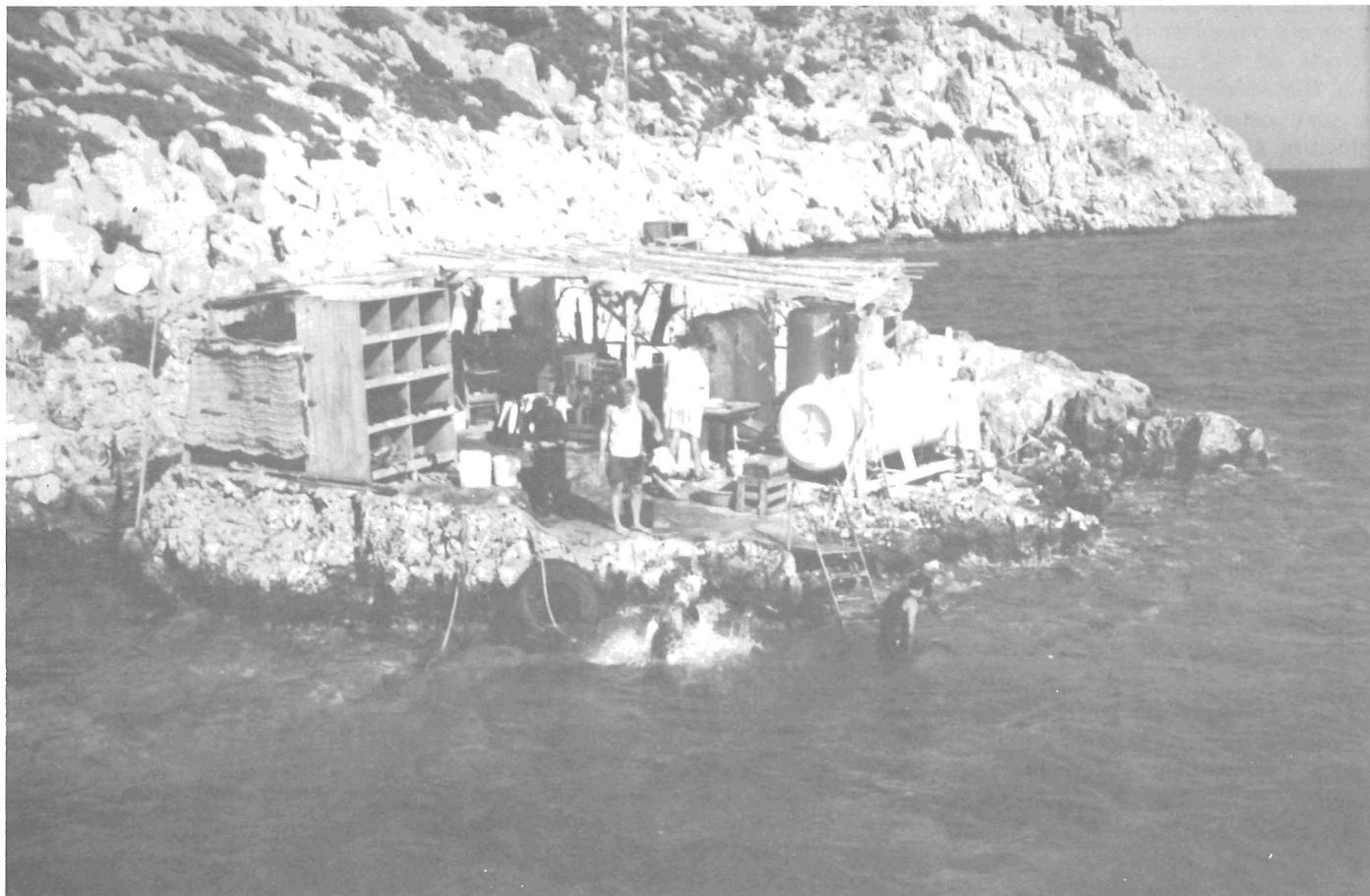




Summer-Fall 1980

## INA IN TURKEY: 1979-1980



*The new "diving barge" at Serçe Liman. Photo: D. Frey*

*George Bass, recently returned from fourteen months in Turkey, reports on the variety of activities in which INA staff are involved there. The Institute was aided in these by grants from the National Endowment for the Humanities, the National Geographic Society and the National Science Foundation.*

A rude introduction to the realities of field work awaited new staff and students who joined us at Serçe Liman in June, 1979. We earlier had abandoned our old wooden diving barge, after 19 years of hard use, in favor of INA's newly acquired

steel-hulled ship *Virazon*. But registration and insurance formalities were not complete, and we did not want to lose precious weeks of excavation time waiting for them — especially when our INA cruise of archaeological sites was fast approaching Turkey from Greece. We hoped that the 1979 campaign on the medieval "Glass Wreck" would be well under way for cruise participants to see on their arrival.

So we bought three sledge hammers and, taking turns in the hot sun, hammered a flat platform out of the hard, jagged rock along the water's edge. There we man-

handled our ton-and-a-half recompression chamber ashore from a small boat, plumbed it, aligned compressors and air banks, shaded the entire area with woven mats, and called it a "diving barge." It was farther away from the wreck than our true barge had been in past summers, moored directly over the site (see AINA Newsletter Vol. 5, No. 2/3), but hoses and divers had no problems in reaching the remains of the ship about 280 feet out and 110 feet down from our land-based diving platform.

On the day after we had carried the underwater telephone booth back down

the slope, and inspected the wreck for the first time in nearly a year, I rushed back to Bodrum to meet the INA cruise, leaving others to complete the construction of the camp which would be home for thirty-odd people over several months. Michael Katzev had guided cruise members aboard *Orea Eleni* from Athens as far as Samos, and now I was to take them along parts of the Turkish coast, starting at Ephesus. Showing them through the galleries of the Museum of Underwater Archaeology in Bodrum was a particular pleasure, especially as Dick Steffy's reconstruction model of the seventh-century Yassi Ada shipwreck had just gone on display in the center of the Byzantine hall, surrounded by artifacts we had raised from the actual ship. That evening museum director Oğuz Alpözen hosted an outdoor dinner, highlighted by folk-singing and a showing of the Turkish television film of our Serçe Liman project, in the Castle of the Knights of St. John which houses his museum.

Because of cabotage laws, I could not accompany the cruise on *Orea Eleni* from Bodrum to Serçe Liman, so I traveled quickly by car and fishing boat via Marmaris to beat the cruise there. We wondered, nervously, if cruise members could tell that the last nails had been driven into the camp only hours before their arrival! And we hoped they enjoyed visiting us half as much as we enjoyed the banquet given on board their ship for our entire, tired staff. It was good to see so many old friends and to make new ones.

Although the swim from our new "diving barge" of solid rock was greater than that from the wooden barge we had used in past years, excavation went extremely well, and within six weeks we had completed the mapping and raising of all fragments of glass and wood remaining on the site.

Some of the staff then returned to Bodrum to begin the conservation and study of the newly raised materials, but others of us decided to remain at Serçe Liman for several additional weeks to have a closer look at the nearby Hellenistic wreck we had examined only briefly in 1978 (INA Newsletter Vol. 6, No. 4). Cemal Pulak, veteran of several past INA excavations and now enrolled at Texas A&M University, was in charge of this phase of the overall Serçe Liman project. Although we continued to dive from the rock platform at the water's edge, we also moored the *Virazon*, which by now had arrived, directly over this site to serve as a floating platform for some of the necessary equipment.



*Amphora being recovered from partially excavated grid square on Hellenistic site at Serçe Liman.*

Cemal and his assistants, after carrying the telephone booth and metal mapping grids from the medieval wreck to the Hellenistic one, were involved mainly in mapping hundreds of Knidian amphoras of two sizes, raising them to the surface, and studying their contents, capacities and handle stamps. In one two-meter square on the site, however, I was able to excavate to a level beneath the cargo of amphoras, and there found more than a dozen small globular jars without handles, three millstones similar to those from the Kyrenia ship on Cyprus (INA Newsletter Vol. 7, No. 1), pitchers, a small table amphora, and other artifacts of wood, stone and lead. Below and around these finds were traces of wood which we covered again with sand to await full-scale excavation at a later date. Part of the wreck here seemed to run under a solid rock outcrop at the base of a rocky slope just above the wreck, and photographs of this would intrigue us during the coming winter months.

Back in Bodrum, at the end of summer, we continued the study of the Glass Wreck that Frederick van Doorninck had begun during his year in Turkey that just overlapped mine. Texas A&M students Dorothy Slane, Robert Adams and Cemal Pulak joined me in the Bodrum castle's English Tower basement, assigned to us by Oğuz Alpözen for study of the medieval glass; an upper floor served as our pottery depot. As soon as we had finished constructing long work tables and shelves and covered them with white oilcloth, Robin Piercy wired the lower level of the tower for

lights; somehow we learned to work around daily electric cuts of up to eight hours caused by the fuel crisis in Turkey at that time.

The task before us was staggering. Stacked around us were crates containing about two thousand plastic bags of broken glass, each holding from one to five hundred fragments, and each numbered with a seabed tag giving its provenience to within fifty centimeters on the wreck. Fred van Doorninck already had gone through these bags, removing bits of cullet (raw, unformed glass) and thousands of unidentified objects which we call, almost certainly incorrectly, "candle holders." Thus we were left with bags holding only fragments of glass vessels.



*The English Tower basement — site of medieval glass research. Photo: D. Frey*

## KEITH MUCKELROY

On September 8, 1980, Keith Muckelroy, one of the most promising and productive practicing maritime archaeologists the field has known, died following a diving accident in Loch Tay, Scotland. It was with shock and disbelief that this news was received at INA headquarters. Having celebrated his twenty-ninth birthday only two days previous to the accident, Muckelroy was looking forward to the publication of his second book on maritime archaeology, *Archeology Under Water: An Atlas of the World's Submerged Sites*.

The uniqueness of his talent and ability may be judged from the impact his work has had over the last three years on the field of maritime archaeology. This impact has been entirely out of proportion, by conventional standards, to the length of his involvement and academic credentials in a field which

typically receives its theoretical framework from its oldest, most experienced practitioners. Muckelroy's first book, *Maritime Archaeology*, published in 1978, has received wide acceptance as the best on the subject at present. It was apparent to the international community of maritime archaeologists that he was, in the words of Professor Glyn Daniel, Head of the Department of Archaeology at Cambridge, "destined to go very far and make important and original contributions to learning."

Muckelroy's energy, insight and dedication will be sorely missed. The untimely passing of one already so prominent and with such a promising future cannot but evoke the lament of the Ancients, "Those whom the Gods love, die young."

— D.H.K.

## 1981 CONFERENCE ON UNDERWATER ARCHAEOLOGY

The 12th Conference on Underwater Archaeology will be held at the New Orleans Marriot Hotel in New Orleans, Louisiana, January 4-7, 1981, in conjunction with the 14th Annual Meeting of the Society for Historical Archaeology. The proposed CUA program consists of concurrent symposia with topics ranging from ship architecture and construction through historical research to the conservation of artifactual material. An underwater archaeological film festival is also planned.

INA President George Bass will deliver a keynote address to the CUA/SHA General Assembly, and Institute professors Don Hamilton and J. Richard Steffy and Texas A&M University graduate students will present papers on various aspects of INA research projects.

For further information on the conference, contact Gordon P. Watts, CUA Program Chair, Underwater Division, North Carolina Division of Archives and History, Box 58, Kure Beach, NC 28449 — (919) 458-9042.

## PROFILE



John Baird.

When we put together an album of snapshots to preserve an unofficial history of INA, we were surprised to see pictures by John Baird turning up so often — on the sites of the *Defence* in Maine, the *Santo Antonio de Tanna* in Kenya, the Cornwallis Cave Wreck in Virginia, and the medieval Glass Wreck at Serçe Liman, Turkey. One of our founding directors, who also served a term as Chairman of the Board, John Baird has shown a keen interest in seeing INA's various excavations progress in the field.

John Baird's forty years with the Lubrizol Corporation, his membership and offices in technical groups such as the American Petroleum Institute, the Society of Automotive Engineers, and the National Lubricating Grease Institute, as well as his present love of collecting antique cars, have made him a prime source for locating various spare parts for the machines which keep INA going in the field — parts too often produced by manufacturers who long

ago went out of business!

Baird is a graduate of the Case Institute of Technology. He and his wife Eleanor, both of whom sailed on the 1979 INA cruise of nautical archaeology museums and sites in Greece and Turkey, have three children, and lead an active life of retirement in Cleveland. There he is extremely active in community organizations, currently serving on boards and committees of the Natural History Museum, Huron Road Hospital, Case Western Reserve, the Crawford Auto Museum, and the Western Reserve Historical Society. Several antique music boxes from his extensive collection were included in a 1978 Musical Box Society display at the Western Reserve Historical Society.

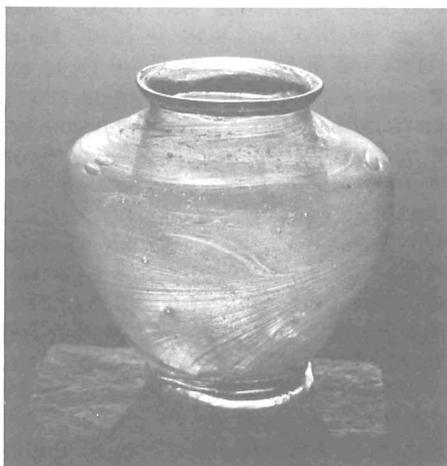
Antique car rallies in England... hot-air balloon trips over game preserves in Kenya... hospital board rooms. Surely one man can't be in so many places. Perhaps John Baird is twins!

(Continued from p.2)

Each bag was weighed and the weight recorded for future analyses of weight distribution in the cargo hold of the ancient ship. Then the bags were opened and their contents piled up on the work tables where all of us, assisted by volunteers Suzanne Biehl, Lynn Waters, Alan and Gordon Bass, and others, wrote with ink on each fragment its provenience code-number. We then coated this with polyvinyl acetate (or clear nail polish) to protect it from being rubbed off.

We did not know at that early stage if we would find even one join between glass fragments, for we scarcely understood the nature of the cargo. It already was clear to us that the cargo was of broken glass destined to be recycled, and that it had been packed down and broken more thoroughly to take up less space in the ship's hold. But we did not know if the fragments were from broken but nearly complete vessels, or if they were separate pieces from a wide variety of sources.

This lack of knowledge led us initially into a mistaken approach. We believed that if joins were to be found, they would be found among those fragments which were closest to one another in the wreck. Thus we arranged the two thousand plastic bags according to areas on the wreck and then weighed, labeled and spread out on the tables all the fragments from a specific one-meter square on the wreck. We found very few joins. We next commenced cataloguing tumbler bases, jar rims, bottle necks and other recognizable shapes under the assumption that we would have few, if any, more complete pieces in the cargo (living quarters on the ship had yielded nearly eighty intact glass vessels).



*Intact jar from stern section of "Glass Wreck."*  
Photo: D. Frey

Before long we realized there was a different approach, and packed all of the glass back into plastic bags. From that time as we emptied bags and inked the shards with provenience numbers, we sorted the glass into nearly twenty separate categories such as plain dimpled glass, purple glass, green-threaded glass, dark blue glass, cut glass, and so on.

Because even the vast table space we possessed allowed us to spread out only about a tenth of the total volume of glass at any one time, most of the glass was packed immediately back into bags and boxed according to type. But we kept out all of the plain dimpled, purple dimpled and green-threaded fragments and laid these out on the tables. Almost immediately this allowed us to begin piecing together entire rims, or joining necks, sides and bases of vessels.



*George Bass reconstructs glass vessel amid thousands of loose shards.* Photo: D. Frey

Still, the approach was far from perfect. The logistics of dealing with more than half a million fragments of glass — most packed away, invisible, in heavy stacked boxes — caused more than one headache as we rooted through the bags, trying to recall in which bag a possibly joining piece had been seen. At least a year's work was saved, therefore, by our acquisition of thirty chests of drawers from excess United States government property in Turkey, providing us with 120 steel drawers which, lined with thin sheets of white foam rubber, have now allowed us to separate and spread out four or five times the amount possible using only the table tops. At the same time, the additional open work space provided by the drawers has allowed us to refine the basic categories into dozens of sub-categories based on shades of colors and glass thicknesses.



*Jay Rosloff frees glass fragments from concretion.* Photo: D. Frey

Most of the year was spent simply sorting and numbering the glass fragments. The unheated English Tower was almost unbearably cold during the winter months, especially when Cemal and volunteer Bill Collins spent months dissecting large lumps of glass still concreted as they had come from the seabed. Sema Pulak, luckily, was provided with a heated office in which to draw the finds.

The most astonishing discovery for me during this time was not strictly archaeological. It was the discovery of the ability of some people to recognize and store in their minds the most subtle variations of color, feel, shape or thickness. Cemal Pulak, Ann Bass and Dorothy Slane proved remarkable at this, being able to spot one piece among tens of thousands and know, at once, that it joined a fragment they had held perhaps weeks before. So I watched being built up slowly over the long fall, winter and spring months a remarkable collection of bowls, plates, jars, bottles and cups in a seemingly infinite variety of colors and shapes.

Professional glass conservators, I am told, will not touch the edges of two pieces of glass together until they are ready to glue them permanently, lest one edge slightly abrade the other. In our case, with hundreds of reconstructions in progress on the tables at any given time, involving thousands of pieces of glass, we had no

choice but to stick our joins together temporarily with tape. Otherwise we never could have kept up with the work.

High humidity in the tower, especially after winter rains, sometimes caused the tape to loosen so that partially restored bowls opened out like the petals of a rose and lay flat on the tables. To prevent this we cut form-fitting molds from sheets of styrofoam, again courtesy of excess U.S. property.

By the time I was ready to return to College Station, hundreds of glass objects were archaeologically complete — that is their profiles were complete and they were missing only fragments which could be reconstructed in drawings. Yet this vast number of examples was drawn only from selected categories of glass, the bulk of which remains in drawers awaiting later study and mending.

Elsewhere in the Bodrum castle, during the fall, Sheila Matthews continued recording the ship's wooden hull remains to provide Dick Steffy, back in Texas, with the information he needed to begin a tenth-scale reconstruction model as an aid to eventual restoration and display of the original hull fragments. Conservator Robyn Woodward followed Don Hamilton in the Bodrum Museum's conservation laboratory to provide a full year's work on cleaning and consolidation of other finds from the Glass Wreck.

Before spring had yet warmed the Bodrum air, some of our staff left their duties in the museum to assist Tufan Turanlı in transforming the *Virazon* from a 65-foot light cargo vessel into a proper research

ship for nautical archaeology. Manufacturers of much of the machinery on the *Virazon*, a 25-year-old ex-Army T-boat, are now out of business, and Tufan had spent most of the year writing, searching and pleading for spare parts. INA Directors John Baird and Nixon Griffis, helped by Chuck Collins, whom we had met on the INA cruise, kept a steady stream of items flowing to us in Turkey through our College Station headquarters.

As parts arrived in Bodrum, Don Frey left his darkroom, joined by Texas A&M student Jay Rosloff. They found that the interior of the hull below the floorboards probably had not been inspected since the ship originally was launched. They put together a sand blaster and, wrapped completely in plastic raincoats and wearing full-face masks with air pumped to them from a compressor on deck, took four-hour shifts working in the hold until all of the rusty plates were like new. Some of the spaces in which they worked were so small that I remember having to pull Don from the bilges by his legs through a tiny opening.

As soon as the hold was clean and painted, we cut a hole through the steel deck above and, with the help of a steam shovel being used to dredge Bodrum harbor, lowered our recompression chamber inside and bolted it in place. Then Falkland Islander Mensun Bound, now an archaeology student at Oxford University, used his cabinetmaking abilities to build comfortable bunks on both sides of the hold. Don Frey converted one of the ship's two bathrooms into an efficient darkroom and then, joined by Robin Piercy, newly arrived from

Mombasa, attached an eight-foot drafting table to the top of the chamber in the hold. Throughout this time, Jay Rosloff spent hot fifteen-hour days in the engine room, overhauling everything for which Tufan had found spare parts.



*Recompression chamber being lowered into Virazon's hold. Photo: D. Frey*

An attempt to slip the *Virazon* in a Bodrum shipyard failed because of her hull size and shape, but a second shipyard spent a week rebuilding its sled or cradle which, once fitted under the *Virazon*, allowed her to be pulled cleanly and quickly onto land. There we sandblasted and painted the outside of the ship, added a deeper keel which was to make her roll much less, and removed and replaced the main shaft bearing. Much of the work was done under Don's supervision by museum nightwatchmen who "sunlighted" for us, if that is the word for it. By the time she slid back into the water, we felt that we had a vessel ideally suited for our work in the Mediterranean.

*Virazon's* first job was a survey sponsored by the National Geographic Society, a survey still in progress as I write this report. When I left Turkey we had found a number of wrecks, always guided by leads from sponge divers and fishermen, but so far none as promising as the best of those we discovered in 1973 (AINA Newsletter Vol. 1, No. 1). Nevertheless, we were learning the versatility gained by having



*Netia Piercy draws glazed bowls from "Glass Wreck." Photo: D. Frey*

our own self-contained floating headquarters for surveys or excavations.

One morning we inspected and photographed a newly located wreck 150 feet deep near Bozburun. By lunchtime Don had already appeared from his darkroom with large prints of the wreck. Yet we were anchored over the Hellenistic site at Serçe Liman, which we decided to work on whenever we had days free from surveying. Everything we needed for excavation was on board. Cemal unrolled the wreck plan on the drafting table; we lowered air-lifts to the site; and Robin Piercy fired up the high and low-pressure compressors he had arranged permanently on the deck.

We did not plan a full-scale excavation on the Hellenistic site in 1980, but the large rock outcrop noted at the end of the 1979 campaign had continued to puzzle us. After cleaning around it we knew what we had suspected: it was a large boulder, weighing two tons under water, which had tumbled onto the wreck. After removing it from the site by using all of our lifting balloons plus a number of air-filled oil drums, we realized that this boulder was only one of many that must have covered the wreck during a massive rockslide at some unknown time in the past. Therefore, until we remove all of the boulders we will have no idea of the size of the wreck, but already black glazed pottery has come to light beneath the first one moved, and such finds will allow us to date the shipwreck more precisely.



Yancy Mebane fills lifting balloon with compressed air during removal of boulder from Hellenistic site. Photo: D. Frey

## TREASURE, PEOPLE, SHIPS AND DREAMS

In the spring of 1554, four Spanish ships laden with cargo including gold and silver sailed from the Mexican port of San Juan de Ulúa, on the long journey home to Spain. With the hurricane season at least two months away, the ships followed the gulf current northward on the route to Havana. After only twenty days at sea, and more than halfway to Havana, disaster struck. Caught in one of the unpredictable spring equinoctial storms, the ships were battered and ravaged by the raging seas. Three of the ships, the *Santa María de Yciar*, the *San Esteban*, and the *Espíritu Santo*, wrecked off what is now Padre Island, Texas. The fourth, the *San Andrés*, was badly damaged yet managed to reach Havana.

There are many accounts relating to the ordeal of the survivors, most of them conflicting in detail. However, it is generally agreed that most of the three hundred or so people involved in the shipwrecks probably perished in the sea, leaving only a handful of survivors. About thirty of them managed to salvage a small lifeboat and, with the proper provisions, sailed back to Mexico to inform officials of the disaster. The remainder, aware that help was on the way, went in search of a campsite, only to be ambushed by Indians. The exact number of victims is unknown, but it is believed that later accounts probably exaggerated it in order to intensify the already hostile feelings of the Spanish towards the Indians.

Spanish bureaucracy was incredibly slow-moving in all matters, except when it came to salvaging treasure ships. The depleted treasury desperately needed the wealth that sunk with the ships. Thus, six ships carrying 104 men were immediately dispatched from Mexico. Salvage on the *San Esteban* began in late July, as this was the only ship still visible above water; dragging would be necessary to locate the other two. Each day the expedition captain, a notary, and divers anchored a small boat over the site. The divers went down to recover the cargo, using grappling hooks and heavy rope. Although details of the diving operations remain obscure, it is known that these divers could stay down for extended periods of time. The notary carefully recorded each item brought up, with its identifying marks and packaging. Meanwhile, another crew started salvag-

ing the *Espíritu Santo*; one month later the wreckage of the *Santa María de Yciar* was located and her treasures recovered. This costly undertaking lasted three months and resulted in the retrieval of only forty percent of the gold and silver. This meant that approximately 51,330 pounds of the precious metals still remained on the ocean floor, or in the pockets of the salvors.

Yet more tragedy was due Spain. Of 14 ships that were loaded with the salvaged goods, five were lost in a storm, and others were too badly damaged to ever sail again. In light of the poor returns of the salvage expedition and the subsequent disasters, Spain was unwilling and unable to finance another unprofitable salvage venture. And so the shipwrecks lay undisturbed, though not forgotten, for over four hundred years.

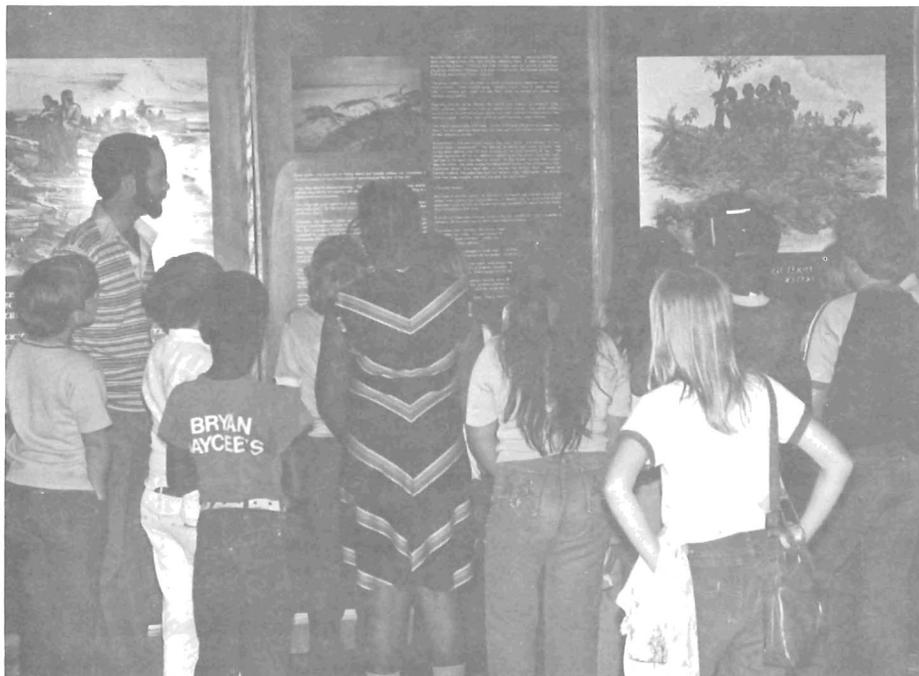
In September of 1967, a corporation of treasure salvors began a search for the 1554 wreck sites. Using a magnetometer (a device that measures disturbances in the earth's magnetic field, sometimes caused by metal from a shipwreck) they located the sites of two of the ships, which were buried in the sandy ocean floor. A legal conflict over ownership of the wrecks soon arose between the corporation and the State of Texas. A few months after they began salvage operations the treasure hunters were enjoined from further work on the site, but ownership of the artifacts remained in doubt as litigation continued. To date, the case has not been resolved. In 1969, the Texas legislature enacted the State Antiquities Code, creating the Texas Antiquities Committee (TAC) and providing means for protecting "all sites, objects, buildings, pre-20th century shipwrecks, and locations of historical, archaeological, educational or scientific interest" in state-controlled areas.

In 1970 TAC issued a contract to the Underwater Archaeological Institute of Dallas to perform an initial magnetometer survey of the shipwreck area. More surveying in the summer of 1972 was followed by an intensive recovery season on the site of *San Esteban*, the one least damaged by recent activity. In that same year TAC succeeded in having the shipwreck area listed in the National Register of Historic Places as an archaeological district worthy of protection. With the cooperation and participation of many interested groups and institutions, further excavation was undertaken at the *San Esteban* site in 1973. Upon its raising, each artifact was documented and immediately subjected to an appropriate conservation treat-

ment. The recovery and conservation work were augmented by extensive scholarly research in the archives of Spain, Mexico and Texas.

The basic assumption underlying the state recovery project was that the educational potential of these shipwrecks was so great as to warrant extraordinary investments of time, energy and funds. This potential has been realized. While the story of the 1554 fleet may seem an isolated historical incident, the investigation of these wrecks has shed considerable light on sixteenth-century trans-Atlantic navigation and commerce. The artifacts from them serve as the focal point of an impressive museum exhibit, "Treasure, People, Ships and Dreams," detailing the major events of this tragic story and its ramifications.

Last May, after many months of preparation, this exhibit was brought to Texas A&M University, largely through the efforts of INA staff and the faculty and students of the University's nautical archaeology program. The Sea Grant College Program at A&M co-sponsored the exhibit, and additional support was provided by the Department of Anthropology, the Graduate College and the College of Liberal Arts. The



*Graduate student Thomas Oertling guides schoolchildren through exhibit. Photo: K. C. Smith*

two hundred people who attended the opening night reception were treated to a showing of "Graveyard of the Gulf," a film documenting the history of the ships and the excavation and conservation of the wreck materials. Keynote speakers at the reception were Dr. Jarvis Miller, president of Texas A&M University, and Dr. Don Hamilton, faculty member of INA and Nautical Archaeology. Dr. Hamilton was largely responsible for the excellent state of preservation of the artifacts on exhibit, as they were conserved under his direction at the Texas Archaeological Research Laboratory.

By the time the exhibit left, more than 9,000 people viewed the artifacts on display, including hundreds of University conference attendees from around the world and schoolchildren on class tours. The excellent turnout was largely due to the cooperation of the local media community who featured interviews with nautical archaeology students on radio and television and in numerous newspaper articles. Sea Grant was extremely generous in printing invitations and posters announcing the exhibit. These posters were distributed throughout the College Station area, and generated a great deal of public interest in the exhibit.



*Young visitors learn "hands-on" history lesson with anchor from 1554 shipwreck. Photo: K. C. Smith*

To the regular TAC displays INA added a slide show depicting its past and current excavation projects, and a videotape on the Padre Island project that included an interview with Dr. Hamilton. Another unique aspect that INA brought to the exhibit was the presence of professional nautical archaeologists. INA staff and nautical archaeology students volunteered their time around the clock as receptionists, tour guides and security guards for the thirty days that the exhibit was displayed at the University.

INA expended so much time and energy on the "Treasure, People, Ships and Dreams" exhibit because it was felt that an exhibit of this type would increase the public's awareness and understanding of the importance of maritime activity in the exploration, conquest and colonization of the New World. The artifacts in this travelling display are some of the more dramatic and significant remains of this important period in history and they reflect much about the people and institutions of the era. The legal, physical and academic process required to preserve ancient remains was demonstrated, as well as the importance of protecting and preserving our cultural heritage for future generations.

— S. Ruby Lang

The Institute of Nautical Archaeology is a nonprofit scientific/educational organization whose purpose is to gather knowledge of man's past as left in the physical remains of his maritime activities and to disseminate this knowledge through scientific and popular publications, seminars, and lectures. The INA Newsletter is published periodically by INA and is distributed to its members and Supporting Institutions to inform them of INA's activities. INA is an equal opportunity organization.



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