

The
INA

quarterly

MAGAZINE OF THE INSTITUTE OF NAUTICAL ARCHAEOLOGY

Staying Afloat

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WE CHECK IN WITH ALBANIA AND SPAIN

FALL 2009 • Volume 36 • No. 3



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insideINA

A Letter from the President

As summer 2009 ended, INA's teams of archaeologists returned from various projects around the world with the results of their work. New discoveries, both in the water and in the laboratories made this summer a productive one. Exciting finds in Spain are unlocking the secrets of the only Phoenician shipwreck yet excavated; a long-lost Gold Rush "time-capsule" shipwreck was found perfectly preserved in the freezing waters of a subarctic lake; the remains of a tragic Cold War encounter that took dozens of lives were discovered along with more ancient wrecks off the formerly closed coastal waters of Albania. These are just a few of the discoveries made by INA and its partners this year.

INA exists to locate, excavate, preserve and share the knowledge gained from the world's most significant shipwrecks and nautical sites. We have been doing so for decades, and today are not only the world's oldest non-governmental organization doing this important work, but also the only organization of our type that spans the globe and all of the world's seas and waters.

The need has never been greater for the work that INA does. Not only are we adding to the history books, and inspiring life-long learners with exciting discoveries that provide a physical link to the past, we are also literally saving history from destruction. The world's greatest "museum" rests at the bottom of the sea, and it is under an unparalleled assault that makes the looting of the National Museum in Baghdad, or the Taliban's demolition of Buddhas of Bamiyan in Afghanistan, pale in comparison.

Every day, deep sea trawlers smash through shipwrecks, scraping them away and destroying fragile remnants of the past that have lain undisturbed for millennia. In late September, at the INA annual meeting, Dr. Robert Ballard spoke passionately about the effects of trawling off the Turkish coast, and showed us all images of seabed scraped as flat as a parking lot, with

wide swathes cut through amphora piles that marked shipwrecks. Every shipwreck destroyed in this fashion is lost forever. In coastal waters, dredging has the same effect—history again loses, and with each loss connections to, and lessons from, the past disappear. Imagine if the Uluburun shipwreck or some of the other great sites excavated by INA and our colleagues around the world, had simply been dredged or bulldozed away? What if they had been looted, or salvaged by treasure hunters?

INA has always stood in opposition to treasure hunting, and to looting. We now must take a stand against indiscriminate trawling that not only destroys archaeological sites but also wreaks terrible environmental damage on vital underwater ecosystems. We must do more than simply oppose these destructive forces—we must take positive action. That's where you come in as members and friends of INA. We will increasingly focus on surveys with our partners (in places like Albania, as you will read in this issue of the Quarterly) to find all that remains, and to determine the sites that are the most important and at greatest risk, and to then excavate. We cannot afford to simply stand by, nor can we blindly hope that opposing trawling or regulating it will solve the problem. Dr. Ballard found wrecks destroyed by recent trawls in areas closed by government regulation to fishing.

Your support and your contributions are needed more than ever. Join us in saving the past before it is lost forever.



Jim Delgado
President



Director Clyde Smith and Jim Delgado hand out INA flags at the annual meeting of the Institute of Nautical Archaeology in Washington, DC.

PHOTO Eric Kemp

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The Ed Rachal Foundation & Texas A&M University Press are some of our treasured supporters.

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Project archaeologist José Rodríguez Iborra prepares to raise an elephant tusk and other artifacts from the shipwreck in a lifting crate.

PHOTO Coral Eginton (2009)

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The Institute of Nautical Archaeology is a non-profit organization whose mission is to continue the search for the history of civilization by fostering excellence in underwater archaeology.

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It's What We Do THAT MAKES A DIFFERENCE

The past twelve months mark another year of achievement and significant results for the Institute of Nautical Archaeology. Fifty years ago this month, Peter Throckmorton and George Bass were seeking funds (a few thousand dollars worth) and planning for what would be the first scientific excavation of a shipwreck at Cape Gelidonya, Turkey. The completion of that excavation and the publication of their findings resulted in several things. A new approach to archaeology was begun. Humanity's understanding of the Bronze Age was changed. A world-class museum of underwater archaeology was founded in Bodrum, Turkey, and ultimately this organization was created.

The legacy of Gelidonya is apparent as INA fulfills the mission its founders began... seeking out traces of humanity's past that lie buried and forgotten on the floors of the world's oceans, seas, lakes and rivers. Bringing to light those remnants of our collective past that speak most powerfully to us, about who we are, what we have done, and what we are capable of. When INA undertakes a project it is done to the highest of standards, and when we focus on a shipwreck, we excavate that wreck not merely because it is "old," but because it is significant, and has the potential to rewrite history. We excavate it completely, and we preserve all that we find. We place the finds in museums. We share what we have learned with wide and diverse audiences, for the benefit of all.

In 2009, INA's core programs focused on archaeological survey, excavation, conservation, analysis, and education. We did so by working with others, notably our longstanding principal partners at Texas A&M University, with the RPM Nautical Foundation, the Waitt Institute for Discovery, the National Geographic Society, and Flinders University. The Institute of Nautical Archaeology conducted or participated in 19 archaeological projects around the globe from the Yukon and Lebanon to Turkey, Japan and Vietnam.

A major excavation in Spain on the Phoenician 7th-century B.C. wreck and in Turkey with the Roman period stone carrier at Kızılburun, exemplify our work on and in the water to recover the past, while surveys of Yukon Gold Rush shipwrecks, the *Anthony Wayne* shipwreck in the Great Lakes, the Battle of Bach Dang/Khubilai Khan Wrecks in Vietnam, a survey in eastern Cyprus survey, and RPM's Albania and Sicilian coastal surveys, are examples of consistent,

high-quality work done to find the most significant sites for future excavation.

In Bodrum, conservation and analysis of artifacts from previous excavations continues. In our labs, conservators, technicians, and archaeologists have unlocked the secrets of concretions, identified species of wood, plants and ancient food, and conducted chemical analyses. They have made breakthrough discoveries on the manufacturing of "standardized" amphorae in the ancient world and have stopped the effects of corrosion and decay so that these finds will be available for future generations. Working with the generous support of the Bermuda Maritime Museum, INA researchers continued the analysis and documentation of the hull remains of a significant early 17th-century wreck. Ongoing work in 2009 included a two-month study to document and transcribe the markings of amphorae from a medieval wreck, undergoing treatment and analysis in the conservation laboratory of the Center for Underwater Archaeology of the National Taras Schevchenko University in Kiev, Ukraine. And research in Venice "unearthed" rare Renaissance shipbuilding treatises and documented the art of shipbuilding in that center of maritime and naval activity.

INA scholars released another landmark book when Texas A&M University Press published the much-awaited and highly praised second volume on the Serçe Limani wreck. The Waitt Institute and INA completed the final report on the Rio Chagres Maritime Cultural Landscape survey in Panama, the final publication on the *Sub Marine Explorer* project in Panama was completed and submitted to Texas A&M Press, and other INA scholars continued work on publications on the Lake Ontario Maritime Cultural Landscape survey and the blockade runner *Denbigh*. INA added significant new content to its website, www.inadiscover.com and published the second volume of the *INA Annual* documenting research projects from 2008. We mentored students, supported their research, sought and obtained grants, made public presentations, and answered inquiries from around the world.

This is what we do together... projects that make a difference to our understanding of the world and our place in it. Along the way, we forge new and lasting relationships between organizations, institutions, governments and individuals.

SOME INA PROJECTS...

- Albania Survey, Albania
- Arade 1, Portugal
- Azores, Portugal
- Bajo de la Campana, Spain
- Bozburun, Turkey
- Cape Gelidonya, Turkey
- Danaos Project
- Egadi Islands, Italy
- Eastern Cyprus Maritime Survey
- Georgian Black Sea Coast, Georgia
- Kekova, Turkey
- Kızılburun, Turkey
- Kyrenia Wreck, Cyprus
- Mazarron Timber Study, Spain
- Pabuç Burnu, Turkey
- Pepper Wreck, Portugal
- Persian War Shipwreck Survey
- Porticello Wreck, Italy
- Project Neptune
- Normandy Invasion Fleet Survey
- Renaissance Venetian Naval Manuscript Study, Italy
- Secca De Capistello, Italy
- Serçe Limani, Turkey
- Seytan Deresi, Turkey
- Tektas Burnu, Turkey
- Uluburun, Turkey
- Volage*, Albania
- Yassiada 4th-century, Turkey
- Yassiada 7th-century, Turkey
- Yenikapi Harbor Wrecks, Turkey
- Columbus Caravels
- Highborn Cay Wreck
- Molasses Reef Wreck
- Monte Cristi Pipe Wreck
- The Port Royal Project
- Puerto Rico Project
- Reader's Point Wreck
- Rio Belén Survey
- Rio Chagres Maritime Landscape Study
- Sub Marine Explorer
- Warwick Project, Bermuda
- Western Ledge Reef Wreck, Bermuda
- Anthony Wayne* Survey, USA
- Clydesdale Plantation Wreck, USA
- Denbigh* Project, USA
- Lake Champlain Projects, USA
- Lake Ontario Maritime Cultural Landscape Survey, Canada
- Red River Project
- Steamboat *Heroine*, USA
- Revolutionary War
- Privateer Defence*, USA
- The Ronson Ship, USA
- Yorktown Shipwreck Project, USA
- Yukon Gold Rush Survey, Canada
- Bahrain Survey, Bahrain
- Dead Sea Coastal Survey, Israel
- Tantura Lagoon Wrecks, Israel
- Battle of Bach Dang Survey, Vietnam
- The Frigate *Ertugrul*, Japan
- North Vietnam Anchor
- Documentation and Assessment
- The Kadakkarapally Boat, Kerala, India
- Khubilai Khan 1281 Fleet
- Shipwreck Timber Study, Japan
- The Aksumite-Period Shipwreck at Black Assarca Island
- Dashur Boats Survey, Egypt
- Sadana Island, Egypt
- Santo Antonio da Tanna (Mombasa Wreck)
- Ghost Ship Survey
- Pisa Wreck Amphora
- Graffiti Project, Ukraine

Keeping INA Afloat

Fifty years ago when Peter Throckmorton and George Bass embarked on their journey to the Cape Gelidonya excavation in Turkey, they began an ongoing search for not only shipwrecks, but also for the financial means to make it all possible. That search continues today, as each year INA undertakes the raising of substantial funds to support projects done around the globe.

In order to finance the considerable achievements of the past year, INA raised and utilized \$2 million in 2009. That includes nearly \$400,000 of “in-kind” support that also contributed to our core program and mission. Texas A&M University estimates that they also contribute another \$500,000 a year through laboratory and academic support, and assistance from INA and University-created and endowed academic chairs.

The search for adequate funding never ends. This year, as in years past, we look for your continued support of the Institute to keep us afloat.

Where does this money come from? (See Figure 1)

The largest amount, representing 55% of our revenue, comes from grants, sponsorships, gifts and in-kind support designated for specific projects. Securing these funds involves many hours on the part of project directors, INA Directors and staff to write detailed grant applications and meet with potential sponsors and donors. These “restricted funds” are targeted by the donors and grantors for specific excavations, surveys, and other core program needs such as education.

In-kind support to INA—paid ship time, supported travel, and donated time, services and equipment—accounts for 20% of our “Restricted Gifts” revenue.

Another 18% of our revenue is generated from the interest income of INA’s endowment fund, which is held and managed by the INA Foundation, a separate body that exists to support INA’s operations. A five percent distribution is made annually from this.

A further 18% is secured through donations made by INA directors, members and other friends for the general “unrestricted” use of INA to support its operation, programs and mission.

As well, our partners and friends at Texas A&M University make an annual financial commitment to INA and that cash support represents 7% of our annual income. We earn an additional 2% through miscellaneous sources such as merchandise sales, membership dues, and non-endowment investment income.

What are we able to accomplish with these funds and the significant in-kind support from our partners? (See Figure 2)

INA spent 82% of its budget on archaeology in the field, in the laboratory and in education with a significant portion of this being dedicated to work done in Turkey at our Bodrum headquarters.

We spent 18% of our budget running the organization, and in generating the further financial and in-kind support necessary to meet our goals. Within this amount, 8% was dedicated to creating opportunities that form part of our outreach program and to help spread the word about INA for educational purposes and to garner additional support and funding.

Generating this support primarily involved public presentations throughout the U.S. and abroad by INA President Jim Delgado, as well as Texas A&M professors and grad students including a major presentation at the Bowers Museum in Los Angeles, another at the Houston Museum of Natural Science as well as participating in conferences and speaking engagements in places as diverse as Washington and Istanbul. Meetings with foundations and organizations such as the National Geographic Society, along with one-on-one appointments with potential partners also forms a large part of the efforts to raise both funds and INA’s public profile. Monies for this work are also specifically targeted to build ongoing support for the organization, especially as we seek to build our endowment to lessen the uncertainties of our reliance on annual fundraising appeals.



FIGURE 1 - Revenue



FIGURE 2 - Expenditures



Of note...

While restricting our administrative costs to 10% of the annual budget, INA manages to maintain its offices at the College Station headquarters as a hub of communication with researchers, scholars, students, faculty and supporters throughout the world. From this location the day-to-day business of INA and the managing of its finances, in compliance with both IRS and international regulations, is accomplished by a hardworking Texas A&M staff who work assiduously on behalf of the organization.

The support raised in the last year was more than just immediate cash—it represents over a million dollars in deferred gifts, and that \$400,000 of in-kind support, which means that while INA benefited significantly from these gifts to further its mission and program accomplishments, it did so without having to write a check... meaning that our investment in development was repaid by a factor of ten in ready cash and in-kind support!

Where do we go from here?

Our continuing mission is “to fill in the gaps of history and provide answers to challenging historical questions through the study and examination of the vessels that have traveled the world’s waterways for millennia, carrying people and cargo, and making possible the widespread exchange of ideas, innovation and invention.”

Today, there is a greater need than ever before to support the work done by INA. An unparalleled assault on the world’s submerged history is under way from more than simply the ravages of time or the continued theft of our heritage by treasure hunters and looters who trade in history for financial gain. Improved technology has allowed us better access to peek beneath the waves and it has become clear to all who care to look, that human activity is having a devastating impact on even the most remote and isolated of environments. Deep sea trawling and dredging has been destroying entire ecosystems and along with them the very shipwrecks that INA is dedicated to preserve. The damage done on all fronts is considerable and growing in scale. We are in danger of losing again what was already lost, only this time it will be permanent. There will be no knowledge gained from these endangered sites once the ocean’s floor has been scraped clean.

We are spending the majority of our revenue on our current archaeological field work, on conservation and analysis in Bodrum, and to a lesser extent on educational projects. We are the ONLY international organization of our kind that can work globally, to locate, document, excavate and preserve significant underwater and nautical archaeological sites. It is a BIG ocean, and the level of destruction and looting is increasing around the world. INA needs more muscle – more funds – in order to meet the need to address the critical issue of the loss of the world’s submerged human heritage. We also need to increase the work we do to bring that history to light.

Donations made to INA will help us make a greater difference as we partner with others and work to maintain our focus to not simply save everything, but to seek out the most historically and socially significant of these submerged sites, and to excavate them to the highest standard... preserving and analyzing them, and then sharing both the artifacts themselves and the knowledge gained from their study, with the world.

Your financial support is directed to core programs that help the Institute of Nautical Archaeology continue its mission and achieve its goals. We value and appreciate that support... already it has made a difference to the work being done by INA and has contributed to a greater understanding of the world. Please support INA in this mission, and join in the excitement of exploration and discovery as we venture forth to reach out and save history before it is lost forever.

To learn more about INA’s work over the last half century and to find out how you can help, go to inadiscover.com where you can make a donation online, and even choose a suitable monthly payment plan. Or please feel free to contact us directly through the INA office in Texas (979) 845 6694.

\$2
MILLION

Budget
for 2009

we use
82%

for
archaeology,
in the field,
in the lab,
& in educational
activities.

38%
of revenue

comes from
supporters
like you!

55%
of revenue

restricted to
designated
projects,
including
in-kind
support

HMS VOLAGE DISCOVERY

In Albania with the RPM Nautical Foundation



RIGHT
(Top) Jeff Royal, Archaeological Director with RPM, in the control room.

(Mid) RPM's research vessel, R/V *Hercules* waits at the dock.



(Bot) The SeaEye Panther Plus ROV awaits deployment, attached to the *Hercules'* A-frame and lifting-winch apparatus.



PHOTOS James Delgado

Albania's coast has been a crossroads of cultures for thousands of years. In the aftermath of the Second World War, the country was closed to most of the world by the Communist government of Enver Hoxha. Following the death of Hoxha, Albania has gradually opened up to international business, tourism and most recently, nautical archaeology.

Since 2007 the RPM Nautical Foundation has methodically surveyed Albania's coastal waters, working with the Albanian Institute of Archaeology, the Albanian Ministry of Defense, and INA as part of a comprehensive search for shipwrecks and other submerged sites. A number of discoveries have been made, including a 4th-century BC Corinthian wreck, a Roman wreck from around 350 AD, scattered amphorae, and modern shipwrecks.

Thanks to RPM's George Robb, Jim Goold, and Jeffrey Royal, INA's Nicolle Hirschfeld (from Trinity University) has been working with them and AIA's Adrian Anastasi to survey and plan the excavation of the Corinthian wreck. I joined the team in 2009 to participate in the survey and a chance discussion onboard RPM's R/V *Hercules* led the team back to a target discovered in 2007. That target, after examination, was determined to be wreckage from an October 1946 Cold War naval encounter known as the "Corfu Channel Incident."

Following the Second World War, Britain asserted that the Corfu Channel, a narrow seaway separating the island of Corfu from the Albanian coast, was an international strait. Albania, at that time a Communist State under the leadership of Enver Hoxha, came into conflict with Britain over the right of passage.

Three separate incidents ensued in 1946. Britain claimed free transit through an international waterway, and decided to test Albania by sending warships through the channel. On October 22, 1946, two of their ships, the destroyers HMS *Saumarez* and HMS *Volage*, struck mines, killing 44 sailors and wounding 42 others. The bow of *Volage* was blown off and sank, carrying several men to the bottom with it.

A British force then moved into Albanian waters to clear any remaining mines. The two governments then entered into a protracted diplomatic and legal battle that ended with Albania losing the case, which went to the International Court of Justice at the Hague. Albania was ordered to pay £875,000 in restitution to the United Kingdom, which it refused to do. Britain then froze Albanian gold assets held in London. Diplomatic relations between the two nations were not normalized until 1991, with the “Corfu Channel Incident” remaining a matter of disagreement.

The incident remains controversial to this day, with unresolved questions. One of those questions, exactly where *Volage* was when the ship hit a mine, has now been answered by archaeology. Rather than lying in the channel, the bow rests in the Bay of Sarande, just offshore of the port of Sarande. This raises the question of just how close the British ships were ordered to “the line” to test – or provoke – the Albanians in 1946.

With *Hercules* held in place by the ship’s dynamic positioning system, remotely operated vehicle (ROV) pilot Kim Wilson maneuvered along the muddy seabed as George Robb, Jeff Royal, Adrian Anastasi and I studied the view screens. Our visibility was hampered by suspended sediment and reduced light levels at depth, but a number of features jumped out to the team. Explosion-torn steel, with exposed frames and electrical wiring, stacks of plates (the bow area was where some of the destroyer’s crew ate and slept), a British canteen, ammunition that appeared to be the right size and shape for

.303 light machine gun rounds, which the ship carried, and the soles of at least three shoes or boots all strongly suggested that we were not on a complete shipwreck, but rather part of the wreck of a modern (World War II or later) British warship that had been blasted off. We quietly filed an archaeological report with the British and Albanian governments, and in early November 2009, the rest of the world learned of the discovery.

Albania’s waters and coast are a virtual museum of the past, and the ongoing RPM surveys continue to catalog and demonstrate how much of that heritage is present and what it can teach us about history and archaeology. Not all of that history is beneath the water; our Albanian hosts took us to an abandoned, formerly top secret submarine base hollowed out of the heart of a coastal mountain, itself powerfully evocative of the Cold War era. The coastline of Albania is also lined with as many as 750,000 concrete pillboxes built during the Hoxha regime to keep outsiders out and Albanians in. The submarine base, the pillboxes, and the bow of HMS *Volage* are all tangible reminders of the politics and paranoia that shaped not only a nation’s history for decades, but which also had profound impacts on the rest of the world.

— James Delgado

For more information on the RPM Nautical Foundation check online at: <http://www.rpmnautical.org>



ABOVE
(Top) A bottle from the Forward Mess of HMS *Volage*.

(Mid) Sole of a boot or shoe in the wreckage.

(Bot) WWII British canteen in the midst of dishes from the ship.

PHOTOS Taken with the ROV and provided by RPM Nautical Foundation





HARD ROCKS, HEAVY METALS

A Report from Bajo de la Campana

The excavation of a 7th-century B.C. Phoenician shipwreck off Cartagena, Spain, an INA project supported by the National Geographic Society, INA directors and donors, and our partners in Spain, concluded its second season of excavation with a series of discoveries that throw more light on the ship's cargo and possible purpose, and add to its significance. Project directors Mark Polzer and Juan Pinedo Reyes led a team back to the site this summer. Here is an update from Mark, written in the field as the excavation concluded, to give our readers an "over the shoulder" view of archaeology as it happens. — Editor

This past week was our last of the season. We lost much of the previous week and the beginning of this one due to stormy weather (which, until then, had been exceptionally kind to us), so we dived straight through the weekend to make up some of the lost days. The work this summer has been rather difficult, especially with so many large boulders to move, but the wreck has rewarded us with some important archaeological finds. The tusks and wood assemblage by the cave was interesting. The wood is not structural, but appears to be cargo. Of course, once its species is identified, I will have a much better idea of its true nature onboard the ship. I found several interesting pieces of worked wood under the tusks, as well as several wooden combs, a metal ingot, lots of dunnage [packing to protect the wooden hull from heavy cargo — ed.], a stash of pine and pistachio nuts almost certainly stored originally in a sack of some sort, many pieces of galena, and several ballast stones. It all appears to be cargo and other items that were stowed in the hold of the ship. I only just cleared out the last remaining pieces of dunnage today, so I haven't gone too deep yet.

One of the main 'themes' of this season (other than heavy rocks) was ceramics. We have found a large assortment of Phoenician pottery (amphoras, bowls, plates, tripod mortars, small jars, and an oil lamp and jug of Tyrian production that are both firsts from the wreck), something that was lacking from our previous campaign. While these objects are all still broken, we have recovered several vessels in their entirety, and have the complete form/profile for many others preserved in their fragments. This is important for our dating of the wreck, which now we are inclined to move back slightly into the last decade or so of the 7th century B.C.

The second 'theme' of the summer was metals. We continue to recover thousands of galena

nuggets from all over the site, as well as a large number of tin ingots of several different shapes, two more copper ingots, and several ingots of unknown metal. I think the ship was also carrying a large load of clay for pottery making or for construction purposes, and possibly red ochre for use in pigments. This is still in question, pending analyses to identify the material, but it would help solve the riddle of a lack of tonnage when one sums up the weights of all the other recovered cargo items.

As important as all this is archaeologically, until this week we still had not found the heart of the wreck. In the meantime, work was continuing in sector G5, which was an area we knew potentially could be important and which we targeted for a test pit of sorts to see how deep the wreck stratum extends. On Friday, at a depth of over 1.3 m (4.5 ft), we found our first complete and intact Phoenician ceramic vessel, an *unguentarium* or small flask typically used for perfumes, oils, or ointments. Then, on Saturday, at about the 1.5-m (5-ft) mark, we found a jumble of odd metallic objects and some wood, all of which appeared at first glance to be more 'modern', and the metal iron. The metal pieces were raised yesterday afternoon. Today, we uncovered more of the wooden structure, and in direct contact with it found dunnage, nuts, pine tar, and a Phoenician amphora (broken, but complete and with remains of its original contents still preserved, which we think may be some type of fish product)—in other words, the wood very definitely belongs to the Phoenician context, and could well be part of the ship itself. It seems to be a thick plank of sorts and is joggled and scarfed at one end, but I couldn't make out any indication of edge fastenings. To cap things off, this afternoon, as we were inspecting and cataloging the artifacts from yesterday, we discovered that one of the metal pieces is a small, cast bronze arm with clenched fist holding a lotus flower or palmette. The arm reminded me initially of the carved ivory cosmetic applicators from Uluburun, only much larger. I am taking a fresh look at the associated objects, which are all made of bronze as well, and am heading to the library in Cartagena tomorrow to see if I can learn what they might be. It is all terribly exciting!

—Mark Polzer, 16 August 2009



ABOVE

Juan Pinedo Reyes examines a nearly complete Phoenician tripod bowl.

PHOTO

Ana Miñano Domínguez (2007)

Detail of a bronze furniture ornament found at the end of the season this summer.

PHOTO Mark Polzer (2009)

The Spanish flag and INA's burgee, generously provided by INA director and project sponsor Lucy Darden, fly proudly.

PHOTO Mark Polzer (2009)

PARTNERProfile

THE NATIONAL GEOGRAPHIC SOCIETY

Since the beginnings of archaeology under water, the National Geographic Society has been at the forefront of support for many important scientific explorations and excavations, including a number of major INA projects that have expanded humanity's knowledge of our expansion across the world by water, and our complex connections and interrelationships throughout the millennia that have utilized the sea.

A quick look at the sponsors listed in Dr. George F. Bass's book "Beneath the Seven Seas" finds the National Geographic Society listed as a major sponsor for landmark excavations such as Ulu Burun, Yassıada, Kyrenia, Serçe Limanı, Pabuç Burnu, Tektaş Burnu, Kızılburun, the Mombasa Wreck, Sadana Island, the privateer *Defence*, and many others since the 1960s. National Geographic has also been there, both as a magazine and as a television broadcaster, making it possible for INA to share what we find, and what it means, with the world.

This year, the National Geographic Society supported four projects, helping INA and nautical archaeology make a difference. We gratefully acknowledge the support, the ongoing relationship, and the friendship of the National Geographic Society, and particularly note the support of the Expeditions Council for their support of the Phoenician 7th-Century B.C. Shipwreck Excavation at Bajo de la Campana, Spain and the National Geographic Society-Waitt Grants Program for their support of these projects:

The Mongol Invasion of Vietnam: Revealing the Secret of the Battle of Bach Dang, Quang Yen, Vietnam;

Search for the Lost Ships of a Pharaoh: A Geophysical Survey at the Pyramid Complex of Senwosret III, Dashur, Egypt;

Reconstructing the Steamboat *Phoenix*, Lake Champlain, Vermont;

Exploring the Ghost Ship of the Yukon: *A.J. Goddard*, Lake Laberge, Canada.

The support of the National Geographic Society, joined by the support of others, makes magic happen in the field – amazing things are discovered, carefully recovered, preserved for the benefit of society, and shared with a wide and diverse audience to help educate and inspire.



The National Geographic Society is one of the world's largest nonprofit scientific and educational organizations. Founded in 1888 to "increase and diffuse geographic knowledge," the Society's mission is to inspire people to care about the planet.

Throughout its 120-year history, the Society has encouraged conservation of natural resources and raised public awareness of the importance of natural places, the plants and wildlife that inhabit them, and the environmental problems that threaten them. National Geographic's explorers, writers and photographers have traveled the Earth, sharing its amazing stories with each new generation. The Society has funded more than 9,000 scientific research, conservation and exploration projects around the globe, and grantees make exciting new discoveries every day in both traditional and emerging fields.

Learn more at...
www.nationalgeographic.com

LEFT
Juan Pinedo Reyes (left) and Murat Tilev (right) rig a lift bag to a large boulder in order to remove it from the site.

PHOTO Mark Polzer (2009)

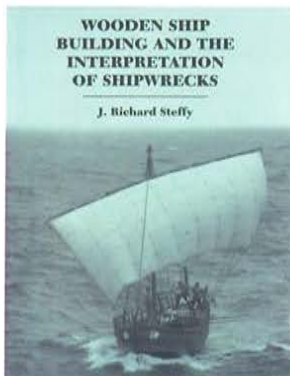


Watch for more updates on the Bajo de la Campana excavation online at www.inadiscover.com and stay tuned for some amazing revelations from the laboratory as the team analyzes the finds of this season.

PARTNERProfile

THE ED RACHAL FOUNDATION AND TEXAS A&M UNIVERSITY PRESS

"We are very proud of our collaborative publishing arrangement with INA, and we are delighted to be working closely with the outstanding scholars in this field based at Texas A&M and around the world."
TAMU Press



ABOVE

The legacy of Ed Rachal (1878-1964) has meant that significant works in the field of nautical archaeology will continue to be published and shared.

PHOTO Courtesy of the Ed Rachal Foundation

The cover of one such classic publication written by J. Richard Steffy (1924-2007).

COVER Courtesy of Texas A&M University Press

A key part of INA's mission since its beginnings has been to publish the results of the meticulous work and dedicated scholarship that is the hallmark of an INA project. It is through publication of articles and books, both scholarly and for the interested public, that archaeologists make a difference. George Bass has said that museum displays are one way archaeology benefits humankind, but the ultimate product is "shelves filled with large volumes written on these vessels and their contents." Those volumes will "provide for the world not only the ultimate histories of watercraft, but the ultimate histories of virtually everything made by humans."

For over thirty years, Texas A&M University Press—the preeminent publishers of scholarly nautical archaeology titles in the United States and world leaders in the field of nautical archaeology publications—has collaborated with INA to publish an ongoing series of books on nautical archaeology, material culture and maritime history.

The production of new nautical archaeology titles by Texas A&M University Press was greatly augmented in 2004 thanks to the Ed Rachal Foundation of Corpus Christi and their gift of a half million dollar fund to support nautical archaeological publication.

The Ed Rachal Foundation was founded at the bequest of rancher and cattleman Ed Rachal (1878-1964) of Rockport, Texas. Mr. Rachal and his wife Louise (1887-1938) believed deeply in education, and this combination of commitments to education and youth, and to the land and its resources, is the cornerstone of the Ed Rachal Foundation's mission." Ed Rachal's will stipulated that his estate "be used exclusively for the benefit of charitable, scientific, literary or educational purposes within the State of Texas." As the Foundation notes, "this rather profound, albeit simple statement provides the mission pursued by the Foundation's management staff and Board of Directors."

In the spring of 2004, Texas A&M University Press announced that through the generosity of

the Ed Rachal Foundation, "the Press's distinguished series of books on nautical archaeology will continue to offer path-breaking research and fascinating revelations in this innovative and important field." The results of the Foundation's support have been phenomenal. Charles Backus, holder of the Edward R. Campbell '39 Press Director's chair, remarks that "the generous and far-sighted assistance of the Ed Rachal Foundation completes and activates that publishing partnership and further energizes our ambitious publishing plans for the digital future."

The Ed Rachal Foundation Nautical Archaeology Series now lists 23 titles, with new books coming out every year. According to Editor-in-Chief Mary Lenn Dixon "The books we have worked on with INA bring us real pride and satisfaction. They are labor-intensive works of love by their authors, and we respond to that with respect and attention to detail. Our staff shares in the pride of bringing these distinguished volumes to the attention of scholars and others interested in the amazing finds INA reports. It is important to us to add the value scholarly publishers are best equipped to give, in our editing, our design, and our production quality."

These important works reflect the scholarship of the authors, the dedication of the Press and their staff, and the incredible support of the Ed Rachal Foundation. The Ed Rachal Foundation has also been instrumental in another major INA project, the excavation, documentation and publication of the results of the Confederate blockade runner *Denbigh*. In 2008-2009, INA received a major grant from the Ed Rachal Foundation to continue developing digital content for its new website (www.inadiscover.com), and to support the publication of *The INA Quarterly* and the new *INA Annual*. INA is grateful for the friendship and support of the Ed Rachal Foundation and Texas A&M University Press.

DONORProfile

CHARLES P. GARRISON, MD

Dr. Garrison is the new Chairman of the INA Board of Directors. A retired physician/medical entrepreneur, he graduated from Indiana University and Indiana University School of Medicine. He was in the private practice of Pathology from 1981-2001 in Atlanta, Georgia. His career in medicine included directing the laboratory of a major metropolitan Atlanta hospital for 15 years, directing an IVF lab, founding a sperm bank, a tissue bank, a cytogenetics lab and an immunohistochemistry lab.

Since retiring from medicine in 2001, Dr. Garrison, has focused on investing in several international businesses including auto financing in Australia, forestry in New Zealand and vineyards in Argentina. He resides with his partner Lisa Guzzetti in Atlanta, in Ontario, and in New Zealand.

How did you first hear about INA?

While on a wine tasting tour of South America, I met Donald Geddes and his wife Marilyn, and over a few wineries and multiple tastings of different Malbecs, I learned about a fascinating organization of which he was the chairman. We became good friends and he invited Lisa and me to Bodrum for an INA meeting.

Why did you decide to join and support INA?

I had been a scuba diver in the past and was fascinated by the interesting personalities and backgrounds of the various INA Board members I met in Bodrum, as well as the stories that were told of the various nautical archaeology projects which were underway and planned.

What role do you see yourself and the other directors playing in INA?

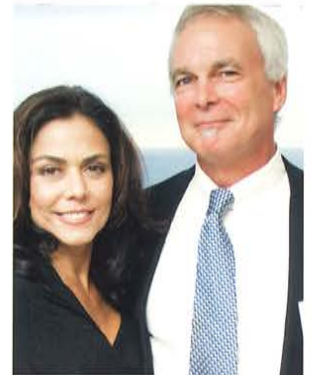
I hope to help the other directors and the President bring in new contributors and sponsors to further the ongoing work of INA and expand its role of the premiere organization, discovering, excavating, preserving and publishing the data on ship wrecks of historical significance.

What role do you see for INA in the next decades?

INA is evolving into an organization, which, while continuing its past course will now embrace a new role, one of being a steward of the world's largest nautical archaeology museum, the world's oceans. We have become aware of the destructive nature of trawler fishing, both on the ocean's wrecks but also on the depleted fish population because of the devastating effects on reef eco systems. INA has recognized a new previously under-appreciated enemy in trawler fishing.

Why should others follow your example and support INA?

I have switched gears, or interests, several times now in my life, and I have found one which can make a valuable contribution, not only to history but to sustainable living and use of the world's oceans. I think with a little education, others will easily see this as a worthy cause and will join in support of our endeavors.



ABOVE

Dr. Charles P. Garrison with Lisa Guzzetti, at the Institute of Nautical Archaeology's Annual Meeting in Washington, this fall.

INARemembers

THOUGHTS FROM FRED VAN DOORNINCK

FYI

The Society for Historical Archaeology has their Annual Meeting on Amelia Island January 6-10, 2010.

There will be a session on the Yukon Gold Rush Wrecks project and a paper presented on the final season of the *Sub Marine Explorer* project.

The Archaeological Institute of America holds its 111th Annual Meeting in Anaheim, California January 6-9, 2010.



ABOVE
(Top) Oğuz Aydemir,
Cemal Pulak and Robert Ballard

(Mid) Lucy Darden,
Karen Wachsmann
and Avery Russell

(Bot) George Bass and
John Broadwater

Lionel Casson (1914-2009)

Most readers of *The INA Quarterly* will be familiar to some extent or another with the life and work of Lionel “Jim” Casson, who died on July 18 of this year. He was an emeritus professor of Classics at New York University, specializing in maritime history, who over a period of 50 years authored or edited two dozen books, as well as a number of important articles, on classical literature and many aspects of ancient daily life including seafaring. Many of his books have become essential resources for scholars but have often at the same time been recommended to the general public by reviewers.

To my mind, Casson’s single greatest scholarly achievement was his “Ships and Seamanship in the Ancient World” (1971). Within only 441 pages in a book of modest dimensions, he summarized with characteristic accessibility all that was known from archaeological, epigraphical, and literary sources about seafaring in the Mediterranean world and neighboring lands from earliest through Byzantine times. By the time I retired from teaching in 1996, my own copy had become a pathetic ruin of loose pages within a broken cover. Casson had close ties with several members of the INA faculty, but particularly with Dick Steffy with whom he edited *The Athlit Ram* (1991).

In 2005, Casson received the Archaeological Institute of America’s Gold Medal Award for Distinguished Archaeological Achievement, an honor he so richly deserved. When Nergis Günsenin, a Turkish nautical archaeologist and long-time INA colleague, visited my wife and me, I told her of Casson’s passing. “I am sorry to hear it,” she replied. “He was one of our great pioneers.”

The 2009 INA Annual Meeting

Friends and partners of INA gathered in Washington, DC at the end of September to attend INA’s annual meeting. In addition to the meeting of the Board of Directors, several committees met to discuss the previous year and plan for the future. Held at the law offices of Covington Burling in Washington, the meetings also featured a reception within view of White House at the historic Hay-Adams Hotel and another reception at the Spanish Embassy to highlight INA’s new partnership with Spain’s National Museum of Underwater Archaeology on the excavation of the 7th-century B.C. Phoenician wreck at Bajo de la Campana off Cartagena’s coast.

The evening banquet honored outgoing Chairman of the Board Donald Geddes and Marilyn Geddes, and welcomed newly elected Chairman Dr. Charles Garrison and Lisa Guzzetti. Also honored were recently retired Deputy Secretary of Defense and former Secretary of the Navy, the Honorable Gordon England, for his support of nautical archaeology.

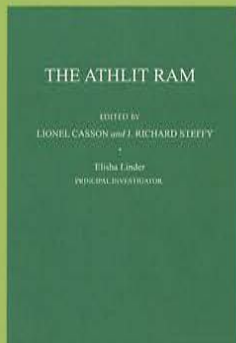
Directors in attendance were presented with their official INA “burgee” or ship’s flag as a symbol of their role as ambassadors of INA, flying the Institute’s flag wherever they travel. Among the guests who received a flag was archaeologist John D. Broadwater, who designed the INA logo from designs on the Institute’s letterhead decades ago when a blank oval on a dive recompression chamber needed to be filled in.

Afternoon presentations by INA scholars and partners gave attendees an “over the shoulder” look at projects around the world and a “first glance” at breaking news in the nautical archaeological world.

The INA Annual Meeting is open by invitation to directors and all supporters who make significant contributions each year to support the mission, programs and projects of the Institute of Nautical Archaeology.

INA Bookmark

TITLES ON NAUTICAL ARCHAEOLOGY & HISTORY



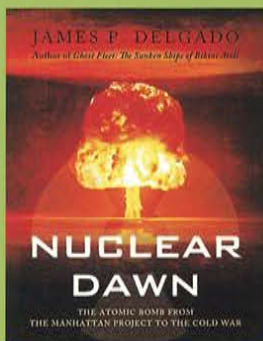
The Athlit Ram
Ed Rachal Foundation
Nautical Archaeology Series

Edited by Lionel Casson and
J. Richard Steffy
TAMU Press, 1991

\$75.00
Cloth

Order your copy at:
www.tamupress.com

In November, 1980, the eastern shallows of the Mediterranean near the village of Athlit, Israel, yielded a remarkable artifact of ancient military history: the bronze ram and connecting bow timbers of an oared warship. It was the first ram ever discovered and thus provided the first evidence for the warships hitherto known only through literary and iconographic references. Fully illustrated with detailed drawings, photographs, and radiographic images for a unique view of the ram, this volume is an invaluable record for anyone interested in classical art or military history and for those who specialize in the technology of ancient maritime construction and modern methods of investigation.



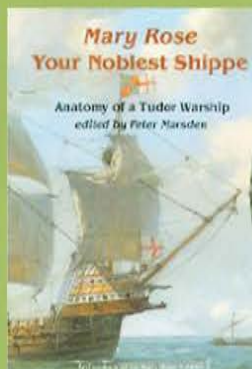
Nuclear Dawn: The Atomic Bomb, from the Manhattan Project to the Cold War

by James P. Delgado
Osprey Publishing, 2009

\$27.95
Hardcover

Order your copy at:
www.ospreypublishing.com

The obliteration of Hiroshima and Nagasaki in August 1945 brought the world to a standstill. This unimaginable shock confirmed to the world that the race to develop a working atomic weapon during World War II had been won by the American-led international effort. Horrific and controversial even today, these first uses of the atomic bomb had intense ramifications not only on the continued development of the bomb, but also on politics and popular culture. As well as the technological development, historian James Delgado also examines how the US Army Air Force had to develop the capacity to deliver the weapons, and examines the sites where development and testing took place, in order to give a comprehensive history of the dawning of the nuclear age.



Mary Rose Your Noblest Shippe: Anatomy of a Tudor Warship

Edited by Peter Marsden
The Mary Rose Trust 2009

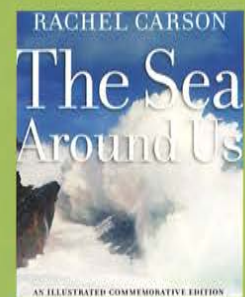
\$90.00
Hardcover

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www.oxbowbooks.com

The second volume in the *Mary Rose* Series looks at how the *Mary Rose* functioned and operated as a warship, including evidence for how the ship was designed, built and rigged. Her recovery and recording are described and the method by which she has been reconstructed on paper. Operational aspects such as steering, mooring, anchoring, the ship's boats, navigation and the removal of water are discussed. A summary of the ship's armaments is provided and her fighting capabilities considered. Evidence for how the ship was altered during her use, and how she might be reconstructed as a whole, are examined and the nature of and reasons for her sinking reviewed. The volume concludes with a summary of some principal areas of research that remain to be addressed.

more...

The Sea Around Us
by Rachel L. Carson
Oxford University Press
2004



Originally published in 1951, *The Sea Around Us* is one of the most remarkably successful books ever written about the natural world. Rachel Carson captures the mystery and allure of the ocean with a compelling blend of imagination and expertise.

This commemorative edition has over 130 beautiful, full color illustrations from all over the world — everything from breaching whales, Christmas Tree worms and phosphorescent shrimp, to fur seals, flashlight fish, and giant squid. The volume features a foreword by Carl Safina, a founder of the Blue Ocean Institute; an introduction by explorer Robert D. Ballard; and an afterword by Brian J. Skinner, former president of the Geological Society of America.

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DISCOVER THE TREASURES OF VIETNAM & ANGKOR WAT WITH INA

Join INA President Jim Delgado and discover the exquisite treasures of Cambodia's Angkor temples and the superb World Heritage Sites, traditional villages, and natural beauty of Vietnam.

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Members who mention INA when booking will receive a signed copy of Jim Delgado's *Khubilai Khan's Lost Fleet*, which includes a chapter on the Mongol invasions of Vietnam.