

The
INA

quarterly

MAGAZINE OF THE INSTITUTE OF NAUTICAL ARCHAEOLOGY

Ghost Ships OF THE BALTIC

A TOUR OF THE VASAMUSEET

Beneath the Surface

New submersible technology

Where in the World?

The 2009 Field Season

SPRING 2009 • Volume 36 • No. 1



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insideINA

A Letter from the President

In the past year, INA has made some major changes and achieved significant goals. Among them are:

- INA's first strategic plan was approved and adopted;
- INA has successfully "rebranded" itself with a new approach to the Quarterly, a new website (www.inadiscover.com has successfully launched and is both attractive and rich with content that describes INA's past, present and future goals), the first issue of The INA Annual has been published and distributed, and INA has new membership and fundraising materials;
- The relationship with Texas A&M University has been reaffirmed as INA's primary partnership, and dialogue and cooperation between the University and INA is open, transparent, and mutually beneficial and supportive. President Elsa A. Murano of Texas A&M University sits as a Director both on the INA board and as a member of the executive committee;
- INA's relationship with the National Geographic Society and the Waitt Institute for Discovery continues to grow—the Society has now provided grants for two years for the Bajo de la Campana excavation in Spain, and the Bach Dang Battle and Mongol Wreck survey in Vietnam, as well as the Yukon Gold Rush Steamship Wrecks survey and documentation project; and the Waitt Institute funded a major survey of the mouth of the Rio Chagres and *Sub Marine Explorer* in Panama;
- A publications plan with Texas A&M University Press has been completed and adopted and is being managed in cooperation with the Department of Anthropology and the Nautical Archaeology Program;
- INA's children's mascot was launched and featured in the first children's book produced within INA's own ranks by Amy Way Anton and Mary Faye Way;
- The Uluburun shipwreck materials were displayed in New York by the Metropolitan Museum of Art as part of the "Beyond Babylon" exhibition that ran from November 18, 2008 to March 15, 2009. All of the artifacts were scanned and documented by the MMA as part of the loan agreement with the Bodrum Museum and this will assist ongoing study and conservation. The exhibition will continue through an educational component, available online through the MMA (follow the link in the News & Events Archive on our website).

In June 2009, INA stands in a position of relative strength. It has focus, a strategic plan, a dedicated core of supporters, an engaged and committed board of directors, and it continues to attract support, including donations and grants. INA has a clear sense of its mission, its focus, and its priorities. There are exciting, ongoing projects that will yield enthusiasm and interest as well as archaeological and historical knowledge, and INA has partners and alliances that will continue to enable the organization to conduct its work and fulfill its mission.

INA's challenges at this time are the same as all other not-for-profits in the United States, and many similar organizations internationally. INA has lost part of its endowment, but is addressing this by retaining its focus and relevance through projects and partnerships that make a difference and through internal financial monitoring and cost cutting. INA is also utilizing some of its strengths—our strategic plan, a commitment to partnerships and cost-sharing, and exploring cost effective options and alternatives. INA will soon launch a new initiative to demonstrate how we are taking action not only to remain sustainable, but also how we can weather this current economic storm and emerge stronger and healthier.

Next year is the 50th anniversary of the landmark excavation of the Cape Gelidonya wreck by George F. Bass and colleagues. That excavation marked the creation of scientific nautical archaeology, and it ultimately brought about not only INA but an entirely new field of archaeological study. Dr. Bass intends to return to Gelidonya to resurvey the site in preparation for a new study and publication. The 50th anniversary of the birth of nautical archaeology offers a unique opportunity to attract new public interest and support, as well as special media attention and we intend to build on that awareness.

To all of you who support INA, thank you again for all that you do.



Jim Delgado
President



At the helm of the 17th-century sailing vessel Vasa in the Vasmuseet in Stockholm.

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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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Ghost Ships of the Baltic

Incredibly preserved ships emerge from the icy depths of the Baltic Sea.

Painting from a display at the Vasamuseet in Stockholm
PHOTO Åke E:son Lindman



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PHOTO www.photos.com



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Jim Delgado in the Super Aviator
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PHOTO D. Calson

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PHOTO Karolina Kristensson /SMM

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PHOTO Stefan Evensen/The National Maritime Museums

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If you are interested in submitting an article for publication please contact the Editor at inaeditor@inadiscover.com

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Images (left to right) from the excavation and recovery that began in 1961.

Vasa's discoverer Anders Franzén.

Vasa's first resting-place after the salvaging was a dry dock.

Diver with a reminder of the lives lost.

PHOTOS

Vasamuseet Archives/SMM



ABOVE

A dusting of snow covers the roofline of the Vasamuseet.

PHOTO Åke E:son Lindman

Ghost Ships

OF THE BALTIC

Surrounded by the countries of Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Poland, Germany, Denmark and Norway, the Baltic Sea is an age old highway of settlement, trade, and war. From ancient treks in skin boats to the epic voyages of the Vikings, the Baltic was an early and important center of maritime activity, and the source of commodities that flowed south to other cultures in the Mediterranean and the Near East. Valuable trade goods such as amber have been discovered far from home, including those pieces recovered from the cargo of the Uluburun shipwreck excavated by INA. As the Baltic opened to greater trade in textiles, lumber and iron, medieval merchants formed the Hanseatic League as emerging global powers including Denmark, Sweden, Great Britain, Russia, Finland, and Germany fought tremendous naval battles for control of the Baltic Sea. As a result of millennia of maritime activity, the Baltic is a graveyard of sunken ships, drowned settlements, lost cargoes, and countless individuals.

Unless otherwise noted all images used within this article are provided courtesy of the Swedish National Maritime Museum and the Vasamuseet.

Our thanks to Fred Hocker, Marika Hedin, Vasamuseet's new Museum Director, and State Maritime Museum's Director, General Robert Olsson for allowing us access to this remarkable ship and for their continued work in preserving this unique cultural and historical asset for all of us to study, learn from and marvel at.

Ghost Ships OF THE Baltic *continued*

What makes the Baltic unique is its cold, brackish water, which preserves wooden ships to an extraordinary level. Only cold, freshwater lakes offer similar conditions for this enhanced form of natural preservation. In the Baltic, divers have found ships that lie on the bottom with their decks intact, masts rising toward the surface, with open hatches leading into darkness, cargo packed in their holds, and the scattered bones of their crew visible as an eerie reminder that these are indeed ghost ships, looking much as they did when they departed from the world of air and light into a dark and frigid resting place many centuries ago.

Among the more famous of these ghost ships is the Swedish warship *Vasa*, built as part of Sweden's naval expansion during the Thirty Years' War. *Vasa* was never to experience the glories of war for which she was built, but rather capsized and sank in Stockholm harbor on her maiden voyage on August 10, 1628 with a loss of thirty lives. Left to the depths after an initial failed attempt to raise it, the ship was

ultimately forgotten, although later in the 17th century salvage operations successfully used diving bells to raise most of its bronze cannon.

Vasa remained untouched until August 1956, when Anders Franzen, a Swedish engineer obsessed with the history of the ship, rediscovered it in 32 meters of water, and began an effort that culminated in the successful raising of *Vasa* on April 24, 1961. The re-emergence of the huge wooden warship was the beginning of a now decades-long effort to excavate, document, conserve, restore, display and interpret *Vasa*. Placed in a new, specialized facility in 1990, today Vasamuseet (Vasa Museum) is Sweden's most popular museum, attracting 1.2 million visitors each year. In fact, between 25 to 30 percent of all foreign tourists to the area come to see *Vasa* and marvel at this huge and magnificently ornamented survivor of the 17th century.

While in Sweden I also met with Dr. Johan Rönby of the Department of Archaeology at Södertörn University College, outside Stockholm,

ABOVE

With Fred Hocker
on the deck of *Vasa*.

One of the storage areas
for barrels and other wooden
items recovered from
the ship.

PHOTO: J. Delgado

THIS IMAGE

View of the Vasa Museum
interior featuring displays,
exhibits, artifacts and
the strikingly ornamented
ship itself.

PHOTO: Karolina Kristensson /SMM

to discuss a wider ranging partnership beyond the Ghost Wreck. And thanks to Fred Hocker, I was not only able to tour *Vasa* and learn more about the ship, its collections, and ongoing needs for preservation and research, but also to meet with Vasamuseet's new Museum Director, Marika Hedin, and State Maritime Museum's Director, General Robert Ollsson, to talk about a formal partnership with the museum.

This alliance would provide an opportunity for INA to support students conducting projects to assess, document and study the ship itself, which has been externally documented for reconstruction, but has not yet been fully drawn or measured internally to the detail that other shipwrecks have. Similarly, while the vast collection of items from inside *Vasa* is catalogued, some 80% of it remains available for detailed study, analysis, and publication. A truly unique and significant opportunity exists here, with the Vasmuseet providing access, and free housing, for emerging scholars to make a substantial difference in better understanding a collection that documents life, service and loss aboard this 17th-century vessel. For example, with every \$3,000 that INA can raise, a nautical archaeology student could fly to Stockholm and receive two full months of study with a modest per diem and their lodging costs covered.

INA's mission focuses on working with partners and friends to ensure that the world's most significant shipwrecks and nautical sites are protected, excavated and studied to the highest professional standard, and then to share that knowledge with a larger audience of scholars, shipwreck enthusiasts and the general public. Both *Vasa*, and the continuing explorations of the Baltic for unique wrecks and sites, provide an opportunity for INA to continue to make a difference. Stay tuned for more on this project in future issues of *The INA Quarterly* and at www.inadiscover.com.

by Jim Delgado

More Discoveries Await

Vasa is not alone in significant discoveries and ongoing work in nautical archaeology in the Baltic. In Denmark there has been exceptional work done with Viking ships at Roskilde. Archaeologists in Finland have started work on the completely intact Dutch merchant ship *Vrouw Maria*, which carried a cargo bound for the Russian Imperial Court in St. Petersburg when it sank in 1773. Among the intriguing list of goods packed inside the ship were 32 paintings belonging to Catherine the Great and intended for the Hermitage. Another 17th-century Swedish warship, *Kronan*, split open by a massive explosion in battle, is the subject of an ongoing excavation off Kalmar, Sweden. In Estonia, Poland, Germany, Norway, and Sweden, a wide range of discoveries, surveys and excavations have added much to our understanding of the Baltic's maritime history and its unique ability to offer insights into wooden ship construction and trade links on a more global scale.

An invitation to learn more and to discuss possible partnerships brought INA President Jim Delgado to Sweden at the invitation of colleagues Malcolm Dixelius and Fred Hocker. Dixelius is a producer with Deep Sea Productions, which in partnership with Marin Mätteknik Ab (MMT), a Swedish-based global leader in undersea survey and documentation, has located a wide number of historic and archaeologically significant shipwrecks.

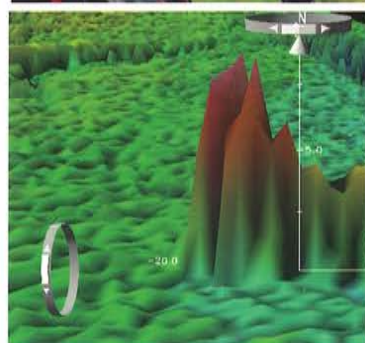
One of these is the "Ghost Ship," a mid-17th century Dutch trading ship that lies off the Swedish coast in deep water. The wreck is not only the subject of a Deep Sea Productions film, but thanks to MMT and other supporters, is also an ongoing archaeological project uniting Swedish and Dutch archaeologists, historians, and scientists. With support from INA, Texas A&M nautical archaeology program student Donovan Griffin has joined the project for two seasons of work. Watch for updates on this and other 2009 INA projects on our website



ABOVE
Lifesize wooden figures in a cutaway display of the gundeck. PHOTO: J. Delgado

BELOW
Donovan Griffin (left) with Ola Oskarsson, CEO of MMT.

Bathymetric imaging of the ghost ship site.
Images courtesy of MMT



INA projects

USA - Ohio

Anthony Wayne Shipwreck Survey*

Directed by Bradley Krueger and Carrie Sowden
In partnership with the Great Lakes Historical Society, this project will investigate the remains of *Anthony Wayne*, a mid 19th-century side-wheel steamer that met a tragic end off the shores of Vermilion, Ohio in 1850.

SPAIN

Bajo de la Campana

Phoenician Shipwreck Excavation

Directed by Mark Polzer and Juan Pinedo-Reyes
The second season of excavation on a 7th-century BC Phoenician shipwreck will commence again this summer off Cartagena. The initial dives on the site yielded well-preserved elephant tusks with Phoenician inscriptions, amber and ceramics.

VIETNAM

Bach Dang Documentation and Assessment *

Directed by Randall Sasaki and Jun Kimura
A National Geographic Society funded survey and assessment will take place at the site of a famous battle outside Hanoi where Mongol invaders sent by Kublai Khan met with defeat in 1288. A preliminary survey of the battle site and previous investigation of the site by Vietnamese archaeologists has documented the survival of large wooden stakes planted in the river bed to trap the invading fleet.

SWEDEN

Baltic Ghost Wreck Project *

Directed by Donovan Griffin
A perfectly preserved, nearly intact merchant vessel from the early to mid 17th century lies in 125 meters of water off the coast of Sweden in the Baltic. The 2009 field season will continue the documentation of the wreck and film it for a television documentary.

USA - Texas

Blockade Runner Denbigh Write Up

Directed by J. Barto Arnold
The test excavation and documentation of this Civil War blockade runner's wreck has been completed. Barto Arnold continues the process of writing up the results of the work for publication.

CRETE TO EGYPT

Danaos Project

Directed by Shelley Wachsmann
The third season of a deepwater survey between Crete and Egypt follows the route of ancient mariners in the hope of finding a Minoan shipwreck.

CYPRUS

Eastern Cyprus Maritime Survey

Directed by Justin Leidwanger
The ancient shores of Cyprus are once more the setting for a survey of shallow water sites, seeking shipwrecks and other remains from maritime activity. The site of a Roman wreck of ca. AD 100, discovered in 2007, will again be the focus of mapping and intensive survey.

JAPAN

Frigate *Ertuğrul* Underwater Excavation, Japan

Directed by Tufan Turanlı
The survey and excavation of the site of a tragic 1890 shipwreck of an Ottoman naval frigate on a mission to Japan again involves a joint Turkish-Japanese team.

BAHAMAS

Harbour Island Archaeological Survey*

Directed by Heather Hatch
This project will investigate sites on land associated with British maritime and mercantile activity from the late 17th and early 18th centuries at Harbour Island, a British settlement in the Bahamas.

TURKEY

Kekova Adasi, Exploration of the Iron Age Shipwreck

Directed by Elizabeth Greene
Located by an INA survey years ago, this ancient wreck was visited again in 2008; permission has been requested to begin excavation in 2009 as part of a collaborative project with Brock University in Canada.

TURKEY

Kızılburun Roman Period Shipwreck Excavation

Directed by Deborah Carlson and Donny Hamilton
The final season of excavation of this 1st-century BCE Roman Period wreck focuses on the buried remnants of the hull formerly covered by the ship's cargo of massive marble column drums.

CANADA

Lake Ontario Maritime Cultural Landscape Study

Directed by Ben Ford
The final season of survey in 2008 cleared the way for this year's completion of a detailed report on the submerged features, shipwrecks, docks and setting of a section of this historic lake, including the scene of naval action in the War of 1812.

UKRAINE

Pisa Wreck Amphora Graffiti *

Directed by Claire Alik Collins
A collection of five types of amphoras from an 13th-century AD wreck, excavated in the Bay of Sudak, off Novy Svet, Ukraine, is the focus of a two-month

In conjunction with Texas A&M University's Nautical Archaeology Program, and Flinders University's Maritime Archaeology Program this year INA will conduct eighteen archaeological projects around the globe in the United States, Canada, Bermuda, the Bahamas, Turkey, Spain, Cyprus, Sweden, Italy, Ukraine, Japan, Vietnam and at sea between Crete and Egypt.

Eleven of the projects are ongoing, and seven are new initiatives.

*New projects are marked with an asterisk**

study to document and transcribe the markings on these medieval storage and transport jars. The jars are in the conservation laboratory of the Center for Underwater Archaeology of the National Taras Shevchenko University in Kiev.

ITALY

Renaissance Venetian Naval Manuscript Study

Directed by Lilia Campana

An ongoing assessment and study of rare Venetian manuscripts dating from 1500 to 1620 will continue to add to our knowledge of Renaissance shipbuilding in this center of Mediterranean trade and culture. In 2009, the emphasis is on the photo reproduction and transcription of a folder of documents, "Patroni e Provveditori all'Arsenale" (Patrons and Superintendents to the Arsenal).

USA - Vermont

Steamboat *Phoenix* *

Directed by George Schwarz

This early American steamboat caught fire and sank in Vermont's Lake Champlain in October 1819. Rediscovered and the subject of a preliminary documentation project in 1981, *Phoenix* will now be extensively documented and virtually reconstructed on computer and on paper.

BERMUDA

Western Ledge

Reef Wreck

Timber Analysis

Directed by

Piotr Bojakowski &

Katie Custer

The timbers from this early 17th-century wreck, previously excavated in Bermuda, are being documented and reconstructed on paper by two talented Nautical Archaeology Program students.

TURKEY

Yassiada Amphora Study, Turkey *

Directed by Frederick van Doorninck

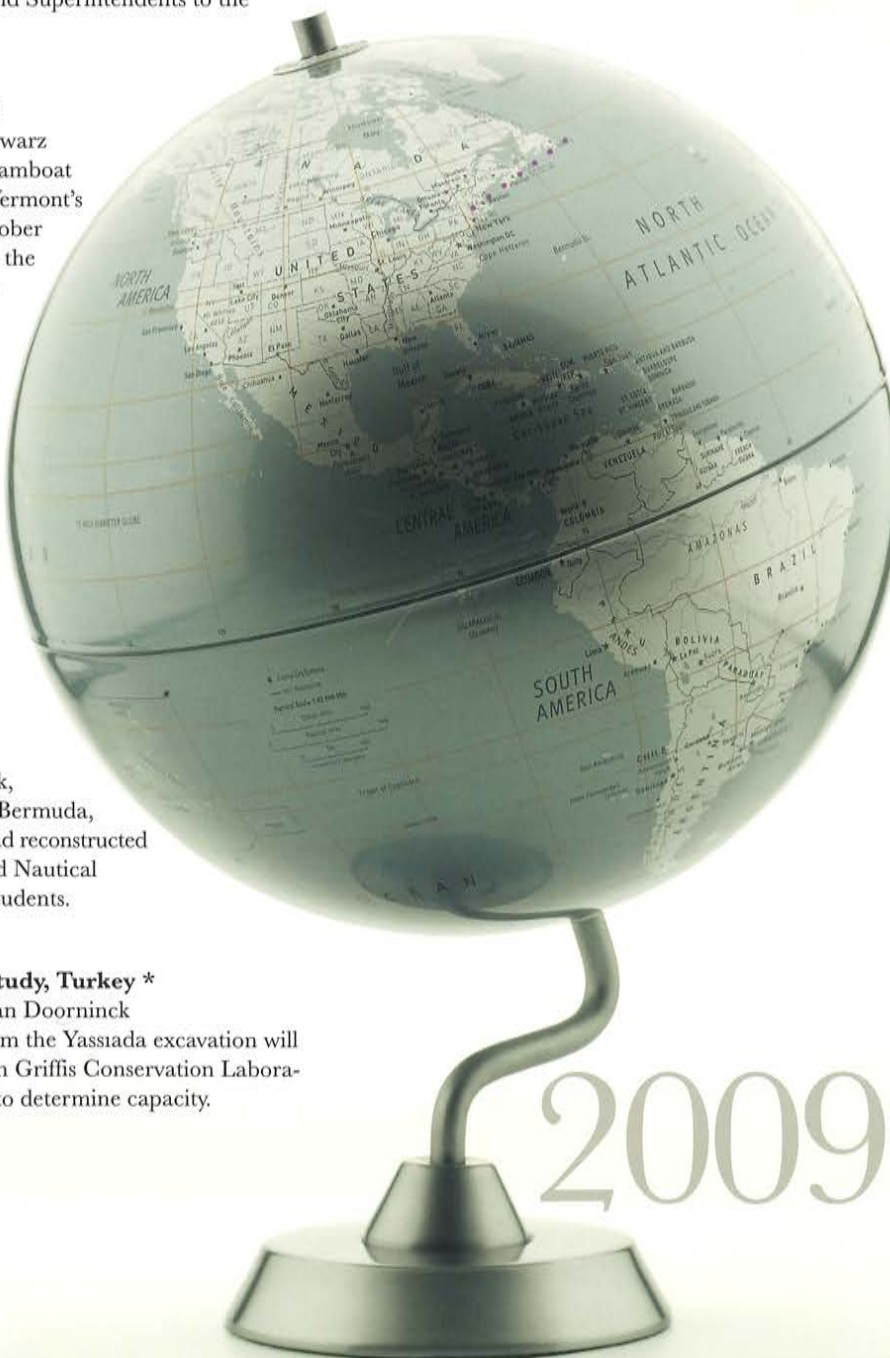
Amphoras recovered from the Yassiada excavation will be analyzed in the Nixon Griffis Conservation Laboratory at Bodrum Center to determine capacity.

CANADA

Yukon Gold Rush Steamer Survey

Directed by John Pollack

Canada's Yukon and the well-preserved remains of Klondike Gold Rush era steamers will be the focus of a third season of field survey and documentation in this remote wilderness. A well preserved wreck, *A.J. Goddard*, discovered in Lake Laberge last year, will be the focus of dives and documentation.



These INA projects would not be possible without the generous support of donors, sponsors, partners, benefactors and friends who have supported the fieldwork, excavation and analysis represented in the 2009 projects.



SUPER AVIATOR

The wave of the future for exploration in nautical archaeology?

Above (left to right)

INA and MBRI team members
Jason Sturgis, Jim Delgado,
Fred McLaren, Steve Etchmendi,
Bruce Robison and Clyde Smith.

Fred McLaren and

Jim Delgado share a laugh
during a pre-flight
systems check.

All photos from the test flight
in Lake Tahoe, Nevada
by Jason Sturgis

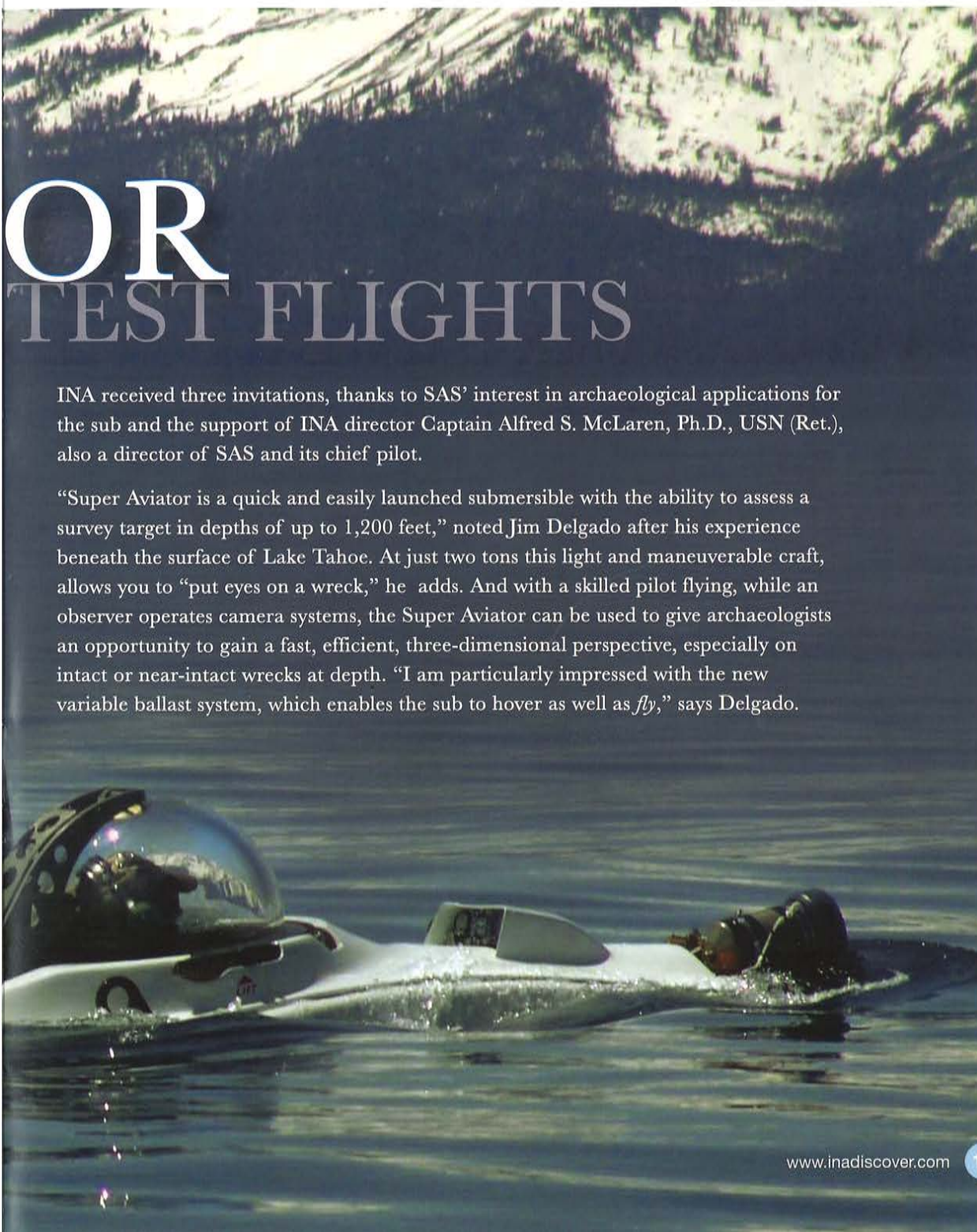
Sleek, fast, maneuverable and sophisticated, the Super Aviator submersible has been gaining a great deal of attention since first launched as the Sub Aviator in 2007. Initially built to fly underwater like an aircraft, Sub Aviator recently underwent extensive modifications at North Vancouver, B.C.-based Nuytco to become Super Aviator with the installation of advanced communications equipment, a sonar suite, HD video capability, HMI lighting, new electronics systems and improved, redundant life support systems, and a neutral buoyancy and weight drop system that allow the craft to hover.

Sub Aviator Systems, LLC (SAS) tested Super Aviator in Lake Tahoe on the California-Nevada border in April and May of this year. Interested in professional feedback as well as determining the needs of the professional and scientific community, SAS invited a veritable *who's who* including Don Walsh, Sylvia Earle, Steve Etchmendi and Bruce Robison from the Monterey Bay Research Institute (MBRI) and astronaut Bill Anders.

Pilot Fred McLaren takes the Super Aviator out for a spin!

“I have never seen any craft that allows you to work in the water column, or at depth, like you can with the Super Aviator. As a diver I am ever aware of how awkward and limited we are when trying to work in the ocean. There is simply no easy way to stay at depth without incurring the penalty of decompression. And as an underwater cinematographer who has been very keen on observing and filming marine mammals I really think that the Super Aviator might be the bridge that lets us spend more time in their world... a tool that gives us a better understanding of what is happening beneath the waves.”

—Jason Sturgis



OR TEST FLIGHTS

INA received three invitations, thanks to SAS' interest in archaeological applications for the sub and the support of INA director Captain Alfred S. McLaren, Ph.D., USN (Ret.), also a director of SAS and its chief pilot.

“Super Aviator is a quick and easily launched submersible with the ability to assess a survey target in depths of up to 1,200 feet,” noted Jim Delgado after his experience beneath the surface of Lake Tahoe. At just two tons this light and maneuverable craft, allows you to “put eyes on a wreck,” he adds. And with a skilled pilot flying, while an observer operates camera systems, the Super Aviator can be used to give archaeologists an opportunity to gain a fast, efficient, three-dimensional perspective, especially on intact or near-intact wrecks at depth. “I am particularly impressed with the new variable ballast system, which enables the sub to hover as well as *fly*,” says Delgado.



Above (from top)
INA Directors
Captain Alfred Scott McLaren
Clyde P. Smith
Jason Sturgis

Joining the SAS field test and flight school were INA directors Jason Sturgis, an accomplished underwater photographer and cinematographer, Clyde P. Smith, who brought his years of experience as special projects director for Clive Cussler's NUMA and National Geographic's “The Sea Hunters,” and INA President and nautical archaeologist Jim Delgado.

Kızılburun

CONNECTING ALL THE DOTS

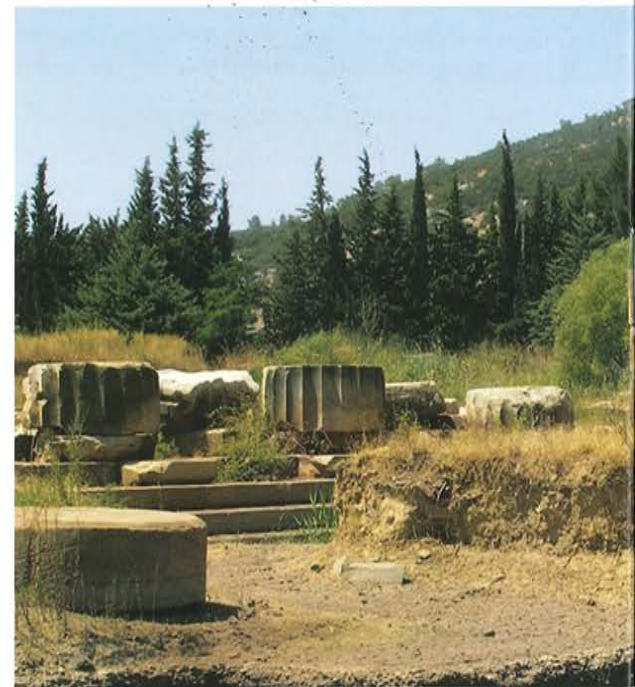
Since 2005, INA has been excavating the remains of a stone carrier shipwrecked off the Aegean coast of Turkey at Kızılburun some time in the first century B.C. The ship was transporting a cargo of marble architectural elements including eight enormous column drums, each between 5 and 6 feet in diameter and over 3 feet tall, as well as a single Doric capital. Isotopic analysis of the marble, conducted by Dr. Scott Pike of Willamette University, has shown that the Kızılburun cargo originated on Proconnesus Island in the Sea of Marmara. In 2006 and 2007, in order to study the construction details of any surviving hull timbers, we carefully lifted each of the eight drums off of the seabed and relocated them next to the wreck site. Once off site, we were able to 'flip' each drum, exposing the bottom face, free of the marine growth that has accumulated over 20 centuries. Measurements of these clean surfaces provide the most reliable data available for reconstructing the original dimensions of the Kızılburun column.

From the beginning it was clear that the considerable size of the Kızılburun drums meant that the column had likely been quarried for nothing smaller than a temple. Furthermore, all of the drums are unfluted, meaning that they were definitely newly-quarried and not salvaged from an existing building. Masons at the quarry often cut such stones slightly larger than necessary, creating what modern scholars refer to as a quarry coat—an additional layer of stone designed to protect an object during transport. The quarry coat was then removed at the construction site, giving each of the finished elements slightly smaller overall dimensions.

In 2007, with the help of Dr. William Aylward, a classical archaeologist at the University of Wisconsin-Madison, I set out to try to find the specific site for which the Kızılburun column was destined. William and I knew we were looking for a site south or west of Kızılburun where a Doric temple in white marble was under construction in the first century B.C. We also knew that the finished, fluted column drums at the site would likely be comparable in size but consistently smaller than the unfinished, unfluted drums in the Kızılburun cargo. Working deductively from these criteria, we were delighted when our search was

narrowed almost immediately to one monument... The Temple of Apollo at Claros, Turkey.

In early August 2008, William and I traveled to Claros to meet Turkish archaeologist Nuran Şahin of Ege University in Izmir, French architect Didier Laroche (French Cultural Institute in Izmir) and archaeologist Jean-Charles Moretti (Université de Lyon) and compare notes about our respective projects. Because the sanctuary is situated over a natural spring and close to the sea, large portions of the site are often submerged under several feet of muddy ground water. Still, Claros ranks among the most scenic, dramatic, and accessible ancient temple sites I have ever visited; proceeding along the Sacred Way just as the ancients did, the modern visitor has the opportunity to inspect numerous commemorative monuments erected by prominent Romans like Pompey the Great and Quintus Cicero. Opposite the temple are the remains of an enormous altar, where rows of iron rings were used to tether sacrificial animals for the hekatomb, a sacrifice of 100 cattle. At the other, western end of the temple are the partial, re-erected remains of three enormous cult statues discovered in the cella and depicting Apollo flanked by his sister Artemis and his mother Leto.



A view of the remains of the Temple of Apollo at Claros from the southeast
PHOTO: D. Carlson

Above (from top)
The marble column drums being
lifted from the sea floor.
PHOTO: D. Carlson

Mike McGlin, Kim Rash, and
John Littlefield pose atop a massive
marble drum from the marble
quarries of Proconnesus Island
in the Sea of Marmara, the point of
origin for the marble column drums
at Kızılburun.
PHOTO: D. Carlson

2008 research team from left to right
William Aylward, Deborah Carlson,
Jean-Charles Moretti, Didier Laroche.
PHOTO: K. Vandenhoe

Our meeting with Laroche and Moretti confirmed what William and I had suspected: that the finished drums and capitals from Claros are consistently smaller than the unfinished drums and capital in the Kızılburun cargo by about 4 inches on each surface; a reasonable thickness for a quarry coat. We also learned the results of their most recent research, which suggests that each of the 14 surviving columns was composed of either 11 or 12 drums. But the Kızılburun cargo has only eight drums, which must mean that additional drums were transported in a second shipment, which may have interesting implications for modern theories about the average size of ancient merchant vessels.

A major goal of the Kızılburun shipwreck excavation, which will resume in 2009 following the study season hiatus of 2008, is to examine what this unique cargo can teach us about the quarrying, transport, and construction of architectural marbles in the ancient Mediterranean. But the wreck also serves as a poignant reminder that monumental building projects like the Temple of Apollo at Claros often dragged on for centuries. At present, it appears the Kızılburun column wreck is poised to provide the kind of historical information that few ancient shipwrecks ever can: the starting point, final voyage, and intended destination of a cargo lost at sea.

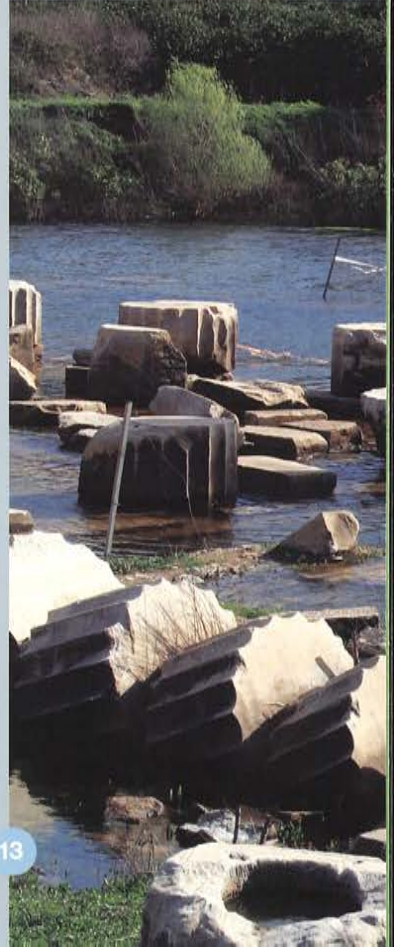
by Deborah Carlson



Construction of the Apollo temple at Claros

began in the third century B.C. and was still ongoing four centuries later. The Roman emperor Hadrian (A.D. 117-138) is named as dedicator in an inscription on the architrave that cannot date before A.D. 135. The temple featured 30 Doric columns arranged around an area 85 x 130 ft., surrounding the cella, where the cult statues were housed. Beneath the cella was a vaulted, subterranean chamber into which a male prophet would descend, drink from a sacred spring, and deliver oracular responses to inquisitive visitors. According to ancient sources, Claros appears to have been highly regarded as an oracular site, with an especially large clientele in Roman times. In A.D. 18, then consul Germanicus, father of the Roman emperor Caligula (A.D. 37-41), visited Claros, and the seer prophesized his early demise; the next year, Germanicus died in Antioch at the age of 34.

The excavation and publication of the finds from Claros were carried out primarily by French archaeologists intermittently throughout the 20th century. Since 2001, excavations have continued under the direction of Nuran Şahin, while Didier Laroche and Jean-Charles Moretti study the architectural remains of the Apollo temple. This research is less straightforward than one might imagine, since none of the columns is standing, some of the components were presumably robbed or burned following the temple's destruction, and many of the components were previously moved off site, making their original provenience uncertain.





Above
The AIA Gala took place at Capitale,
a former bank building in Manhattan's
Lower East Side designed by
Stanford White.

(Left to right)
AIA President C. Brian Rose,
Humberto Domínguez and
INA President Jim Delgado
AIA PHOTOS: Mike Shane

ARCHAEOLOGICAL INSTITUTE OF AMERICA'S 130TH ANNIVERSARY GALA

In April, INA's partners and
friends in the Archaeological
Institute of America (AIA)
celebrated their 130th
anniversary, and the 60th
anniversary of Archaeology
Magazine with a well-
attended, magnificent gala
dinner in New York. A number
of INA members and
supporters were present
that evening, including
Dr. George F. Bass.

Awards were presented to
actor and AIA trustee
Harrison Ford who received
the award for his on-screen
and off-screen work on behalf
of archaeology and for
increasing public interest
in exploring the past. The
Samuel H. Kress Foundation
was also honored for its
many contributions.

INA President, Dr. James
Delgado, was the Master of
Ceremonies for the evening,
and steered the audience
through an amazing evening
with touches of humor and
an abiding passion
for archaeology.

INAnews

Events • Announcements • Celebrations • Opportunities

New Grants

Ed Rachal Foundation supports INA's outreach and publications!

INA has received a \$50,000 grant from the Ed Rachal Foundation to continue work on the new INA website, www.inadiscover.com and to support INA's publications through the Ed Rachal Foundation Nautical Archaeology Series at Texas A&M University Press and the INA Quarterly and the INA Annual, which highlight the activities, research and scholarship of our Texas-based not-for-profit educational and scientific research organization.

National Geographic Society extends their support for more INA projects...

A longstanding supporter of INA since its earliest days, and previously a sponsor and partner with Dr. George F. Bass' pioneering work in nautical archaeology, the National Geographic Society recently awarded three grants to current INA projects.

In May, the Expeditions Council of the National Geographic Society awarded the **Bajo de la Campana Project** a major grant for the ongoing excavation of the 7th-century BC Phoenician shipwreck site. This exciting project is being undertaken in collaboration with the **Spanish National Museum of Underwater Archaeology**.

Through the **National Geographic Society-Waite** grants program, two other projects also received funding: The **Battle of Bach Dang Survey Project** in Vietnam, where a Mongol/Yuan fleet of Kubilai Khan was destroyed in 1288, and the **Klondike Gold Rush Shipwrecks Project** in Canada's Yukon. The work there this year will focus on the nearly intact, sunken 1898 wreck of the steamboat *A.J. Goddard*.

The Klondike Project also received a grant from **ProMare**, which was established by INA director Gregg Cook in 2001 to promote marine research and exploration throughout the world.

The **Samuel H. Kress Foundation** of New York also provided a generous grant to support student travel to and participation in the ongoing excavation of the Roman period stone carrier wreck at Kızılburun, Turkey.

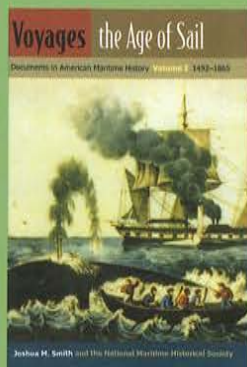
These grants and sponsorships joined a number of generous donations and support from INA Directors, members and other friends. Their support enables INA to continue its important work of saving nautical archaeological information from the ravages of time and looters, by conducting state-of-the-art archaeological investigations, excavations, conservation and analysis. Thank you!

Von der Porten Visits

Edward Von der Porten, noted scholar and expert on early modern ships, particularly European voyages to the Pacific in the 16th century, recently visited Texas A&M University and INA in College Station to share his exciting work on an early Spanish shipwreck in Mexico and his ongoing lifetime work on the round the world voyage of Sir Francis Drake. Von der Porten's landmark work established the California location of Drake's Pacific Coast landfall and fort where he careened and repaired his ship *Golden Hinde* in 1579 as he prepared to cross the Pacific and return to England.

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TITLES ON NAUTICAL ARCHAEOLOGY & HISTORY



Voyages, The Age of Sail Documents in American Maritime History, Volume I, 1492-1865

Voyages, The Age of Engines Documents in American Maritime History, Volume II, 1865-Present

by Joshua M. Smith and the
National Maritime Historical Society
University Press of Florida

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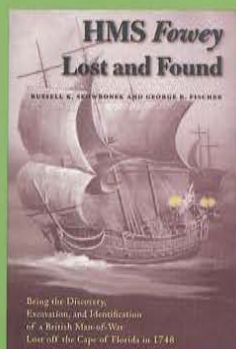


This two-volume set, *Voyages*, covers the American maritime experience from the end of the Civil War through the War on Terror. Published in cooperation with the National Maritime Historical Society, the selections chosen for this anthology of primary texts and images place equal emphasis on the ages of sail and steam; on the Atlantic and Pacific; on the Gulf Coast and the Great Lakes; on the high seas and inland rivers. Each example is linked to the larger context of American history, including issues of gender, race, power, labor, and the environment.

Joshua Smith, Associate Professor of Humanities at the US Merchant Marine Academy, is the author of *Borderland Smuggling: Patriots, Loyalists, and Illicit Trade in the Northeast, 1783-1820*, winner of the North American Society for Oceanic History's John Lyman Book Award for Best US Maritime History.

"This is the most comprehensive collection of maritime history documents ever published. Drawn from a wide variety of sources, they survey virtually every aspect of American maritime history"

—James C. Bradford, Texas A&M University



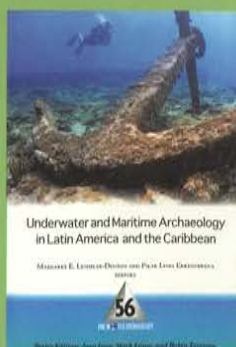
HMS Fowey Lost and Found Being the Discovery, Excavation and Identification of a British Man-of-War Lost off the Cape of Florida in 1748

by Russell K. Skowronek and
George R. Fischer
University Press of Florida

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Traces the life of HMS *Fowey*, a small ship carrying 44 guns and over 200 men which had scored victories over French and Spanish ships in battle, but in 1748 was done in by a reef in what is now Biscayne National Park. Covers the court martial of her captain, her rediscovery in the 1970s, and the long process of artifact recovery and ship identification. The result is a fascinating story of intrigue and adventure that stretches across the centuries.



Underwater and Maritime Archaeology in Latin America and the Caribbean

Edited by Margaret Leshikar-
Denton and Pilar Luna Erreguerena
Left Coast Press

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This groundbreaking book documents the emerging research of maritime archaeologists in Latin America and the Caribbean with case studies demonstrating the exciting, cutting edge research, conservation, site preservation, and interpretation underway. In the last 20 years archaeologists have been fighting to preserve the rich maritime cultural resources of this region.

more...

Unknown Waters:

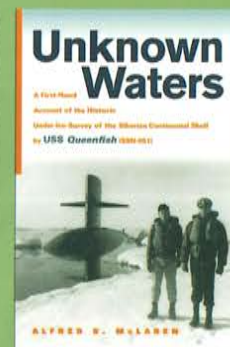
A First-Hand Account of the
Historic Under-ice Survey of
the Siberian Continental Shelf
by USS *Queenfish* (SSN-651)

by Alfred S. McLaren,
Captain, USN (Ret.), Ph.D.

Published by the
University of Alabama Press
March 2008

\$29.95 Hardcover 296 pp.

This book tells the spell-binding story of the officers and men of the nuclear attack submarine USS *Queenfish* (SSN-651) who at the height of the Cold War explored the dangerous, uncharted, shallow, ice-covered waters of the vast Siberian continental shelf for the first and only time in history. The expedition's success earned *Queenfish* and her crew the Navy Unit Citation and her captain a Legion of Merit.



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