

USS Albany CG-10 Class Brass Test Model Presentation

“ Still Making History ”

Purpose of model

CG-10 CLASS BRASS TEST MODEL HISTORY AND BASIC TESTING PROCEDURE

The United States Navy constructs brass test models for each class of ship built to determine the best placement of the antenna and other electronic arrays on the vessels. The Albany Class of guided missile cruiser represented by this model consisted of the USS Albany (CG-10), the USS Chicago (CG-11) and the USS Columbus (CG-12). The models are constructed in 1/48 scale of the actual ship. Moving an antenna one quarter inch on the model is equivalent to moving it one foot on the ship. Obviously, it is less expensive to perform tests and make changes on the models than on the actual ship.

The exact date the model was constructed is unknown, but it was featured in the April 1959 edition of Popular Mechanics magazine. Models take approximately two years to build. It is believed to have been completed and tested prior to the start of the conversion of heavy cruiser CA-123 to the guided missile cruiser CG-10, which took place between 1958 and 1962. At that time, the model would have tested under the old wooden arch shown in the plaque to the left. By its current structural configuration, this model was last used to test the electronics on the USS Chicago. It would have tested under the newer fiberglass arch shown in the plaque to the right.

The arch supports a transmitting antenna which is positioned toward a brass model set on a turntable. The ground plane under the arch simulates the electrical characteristics of the ocean, which allows for research on the properties of shipboard antennas. Cables are attached from the antennas to the test control center. A device on the arch transmits a signal from the test control center computer to the antenna, and as the model is rotated one degree at a time, the device is moved up the arch one degree at a time until testing is complete for a full 360 degrees of rotation and 90 degrees from horizon to directly overhead. This process provides a full spectrum of reception/transmission possibilities. Adjusting the various locations indicates the best achievable performance on the ship with the least amount of interference.

This model was tested repeatedly since there were many modifications to the three ships of Albany class cruisers during their years of service.

SPAWAR



Systems Center
San Diego

Model Ship on Turntable



The 1/48-fullscale brass model ships are accurate models of the real ships. Antennas on the models are illuminated by the transmitting antennas to produce antenna radiation patterns very similar to the radiation patterns measured on the actual ships. Antennas on the model can be easily moved to determine the locations that produce the least degree of Electromagnetic interference (EMI).

Old testing arch



New testing arch



- “Waterline” brass models are built which represent the portion of the ship above the surface of the ocean. These models are placed on a turntable under a testing arch as shown below.

Example of ship model under testing arch



Model Project Timeline of Events

- In 2005, Captain M.A. Kubishen found the model during another ship's reunion being held in San Diego. He notified the Association of the find but the information apparently was overlooked and wasn't passed on for action.

Event Timeline con't.

In early December of 2006, The USS Albany Association President, Bart Hutchins, learned about the test model in an e-mail from the USS Chicago Association.



Event Timeline con't.

- Mid December 2006 Shipmates living in San Diego, CA area (Bill Sperberg, Rick Booke and Bob Rominger) were asked to determine the model's current condition, take photos of it and obtain information relative to the model's purpose. They were also asked to see if & how it might be secured for rehabilitation and display as a piece of USS Albany history.

Event Timeline con't.

Picture by Bill Sperberg (Left)



Event Timeline con't.

- 9/2007 Members attending the 2007 reunion were able to get on base to view the model, meet with the model shop staff along with management at SPAWAR.



Event Timeline con't.

- 9/2007 thru early 2009 many e-mails and conversations took place between President Bart Hutchins and SPAWAR in a very time consuming process. This included communications with Senator McCain's office by Dick Desrochers.
- In early May of 09 the process started to move forward again; SPAWAR's staff more interactive and Military legal staff actively involved. Modifications to the original contract were drafted and approved.

Timeline con't.

- On 5/11/09 a final contract was submitted to the Association President; approved by the board and signed.
- From 5/11/09 thru 5/29/09 the process to secure contractors for crating, trucking and insurances was completed.

Timeline con't.

- 6/14/09 President Hutchins and Heritage Exhibit Curator Wayne VanAmburgh flew to San Diego to secure spare parts and drawings, meet with SPAWAR's staff, as well as oversee the packaging and loading of the model for shipment.
- 6/16/09 The objectives of the trip were completed and the model was on the road to New York with an estimated date of arrival of 6/23-6/27/09.

Timeline con't.

- The model was sent to a warehouse in Hudson, New York for rehabilitation by members before it's final destination at the USS Albany Heritage Exhibit sometime before the end of 2009. It was our intent to dedicate the model during the 2010 reunion.
- The following slides are photos of the model and the process involved for its journey to New York.



6/15/09 Bart & Wayne view model upon arrival at SPAWAR



6/15/09 Cleaned up and prepared for crating

Note the testing arch above the building.



6/15/09 Crating



6/16/09 Model loaded and on the way to New York

Model Info & Statistics

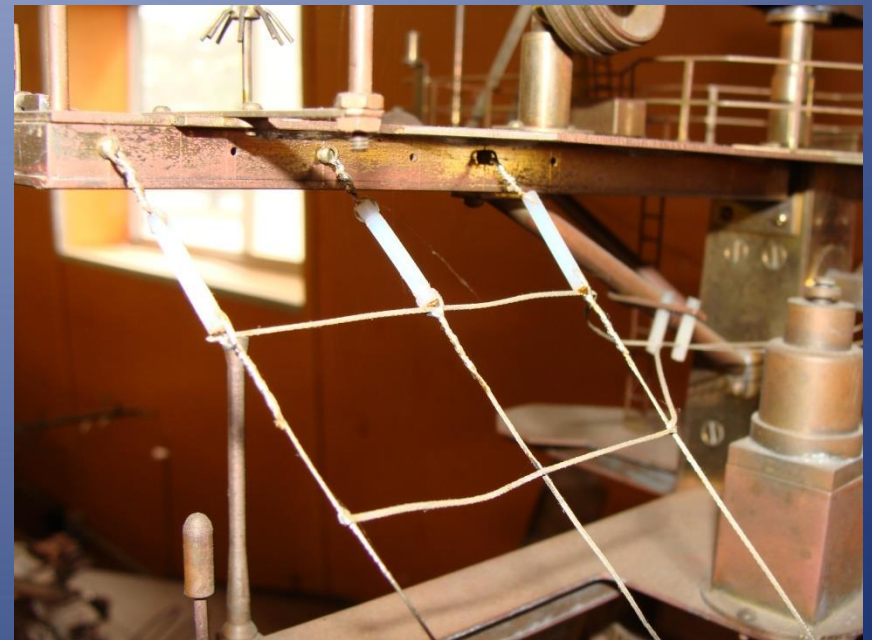
- Size 170" in length, 18" in width, and 50 1/2" in height
- Model is build to scale 1:48 or $\frac{1}{4}" = 1'$
- Material of construction:
Sheet brass .032 thick / Soft .032 / Half hard .032 to .050.
All fasteners are brass screws from 0-80 to 4-40. Solder used is standard 60/40 with No corrode flux.

Example of potential change after clean up

Albany model condition in 2009



Should clean up better than
shown



Model Warehoused in New York



- It was determined that the manpower was not available in to New York to rehabilitate the model so it was decided in January of 2010 to move the model to Maine where President Hutchins had found a business owner (Ed Libitzki of Metal Magic) willing to take on this extensive project.
- Thanks to Scott Vogell and Jerrold Farnham, friends of President Hutchins, this move was accomplished for just the cost of fuel and tolls.

Model moved to Metal Magic in Trenton, Maine in Jan. 2010



Preparing to sandblast with glass beads



Glass beading complete



AT 2010 reunion



Timeline modified

- With much detail work remaining, the model was returned to Maine for completion.
- During the next couple of years due to family health issues for Libitzki and Hutchins, virtually nothing was done on the model; the search for a home for it continued.
- Early in 2013, work resumed on the model and after more than 6 months of intensive effort with Bart Hutchins making or repairing and installing numerous parts and Ed Libitzki applying several coats of clear finish, Hutchins delivered the model to Creatacor for installation at the visitor's center.

Table with some of the parts



Restored model



Ed Libitzki owner of Metal Magic



Views of the CG-10 Class model prior to restoration



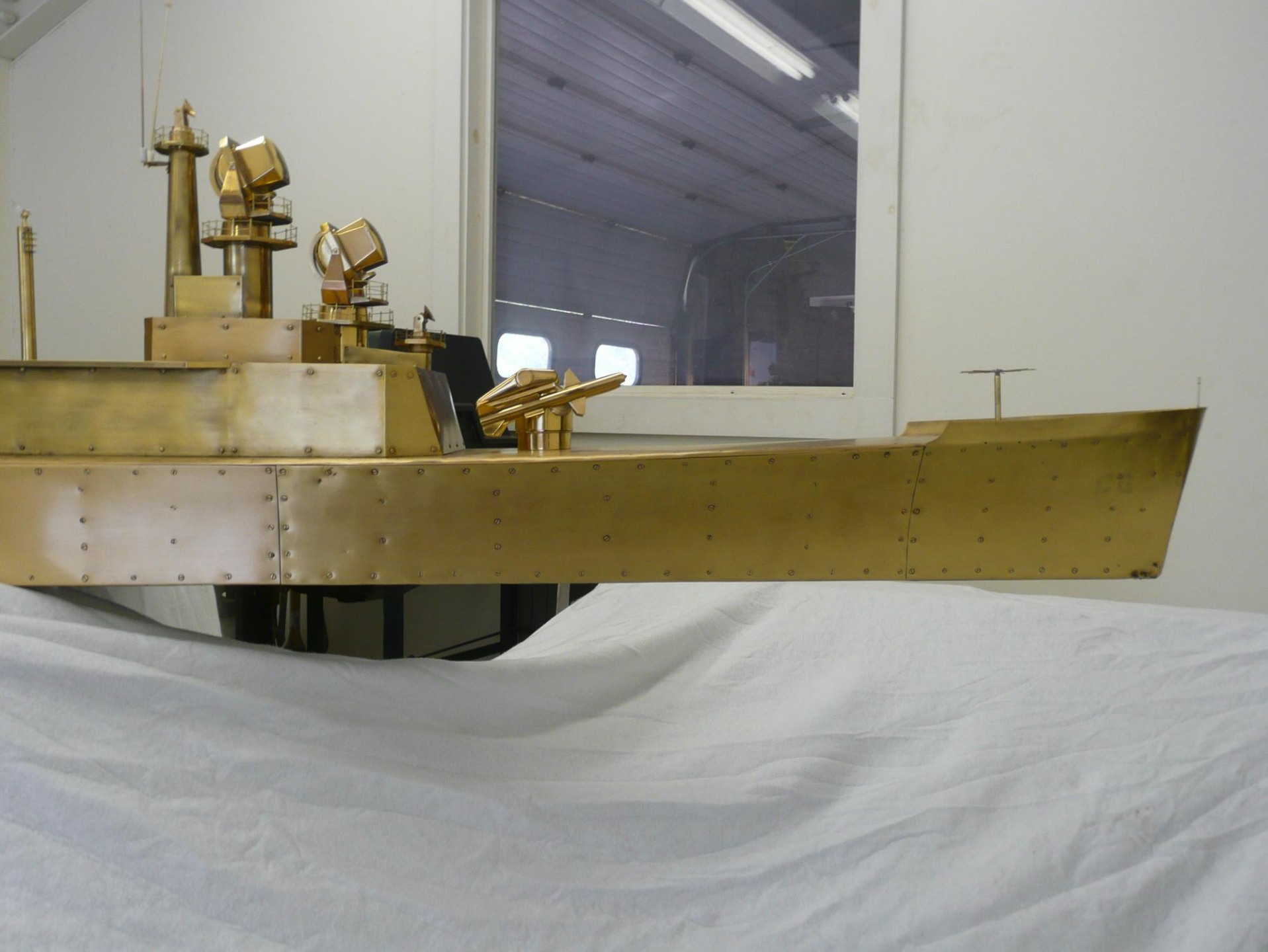


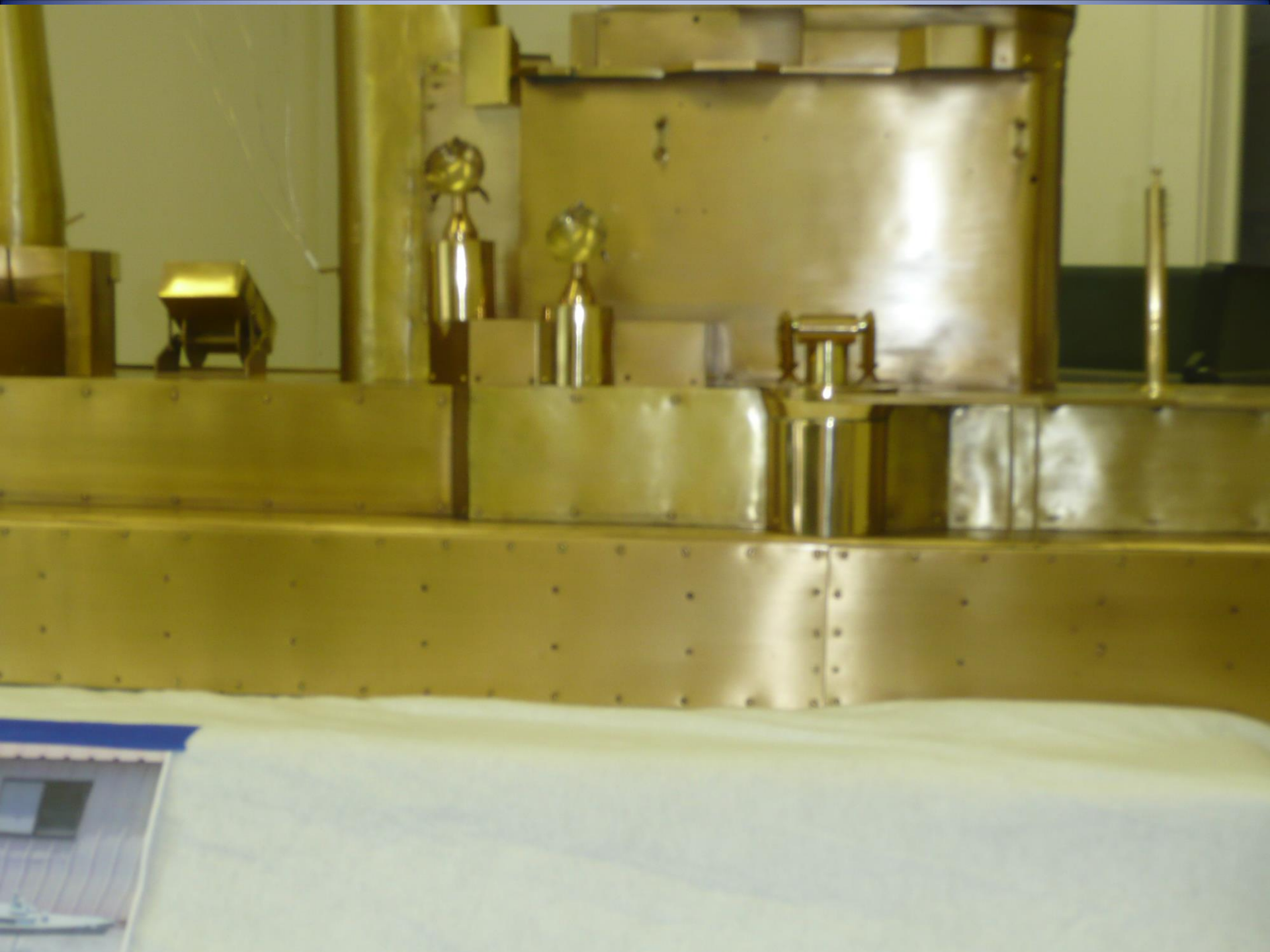


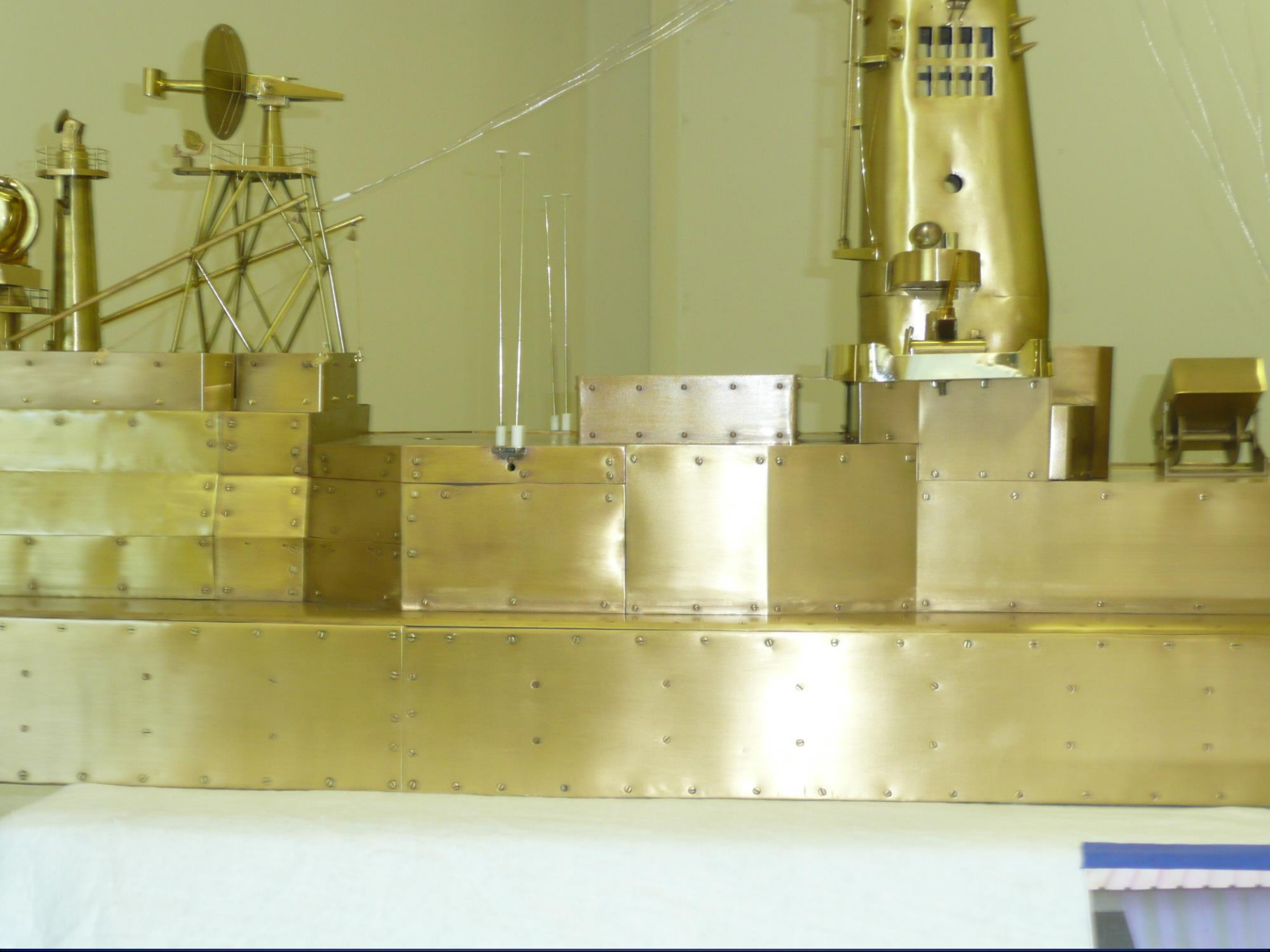
- The following are detail photos of the restored model

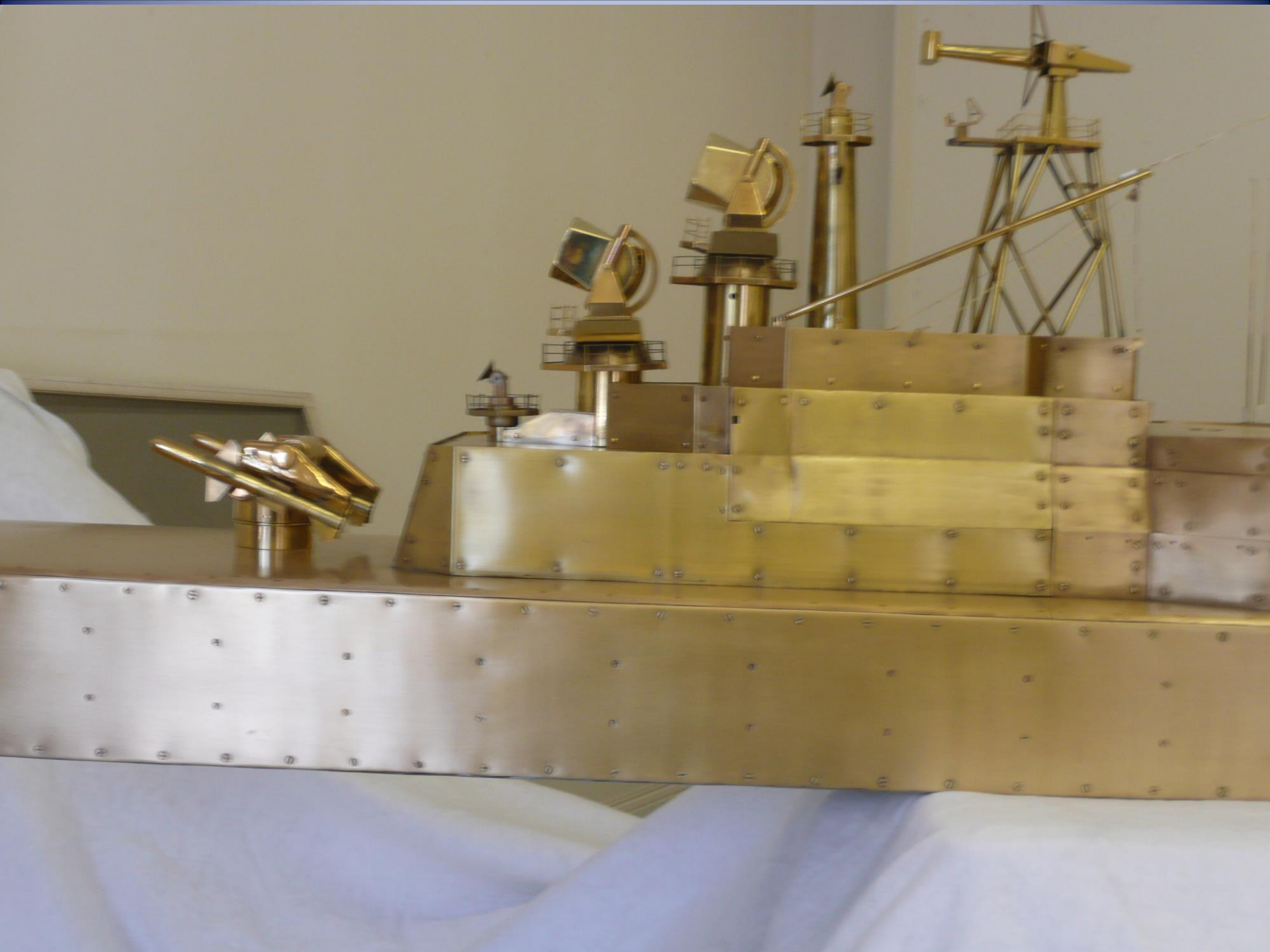




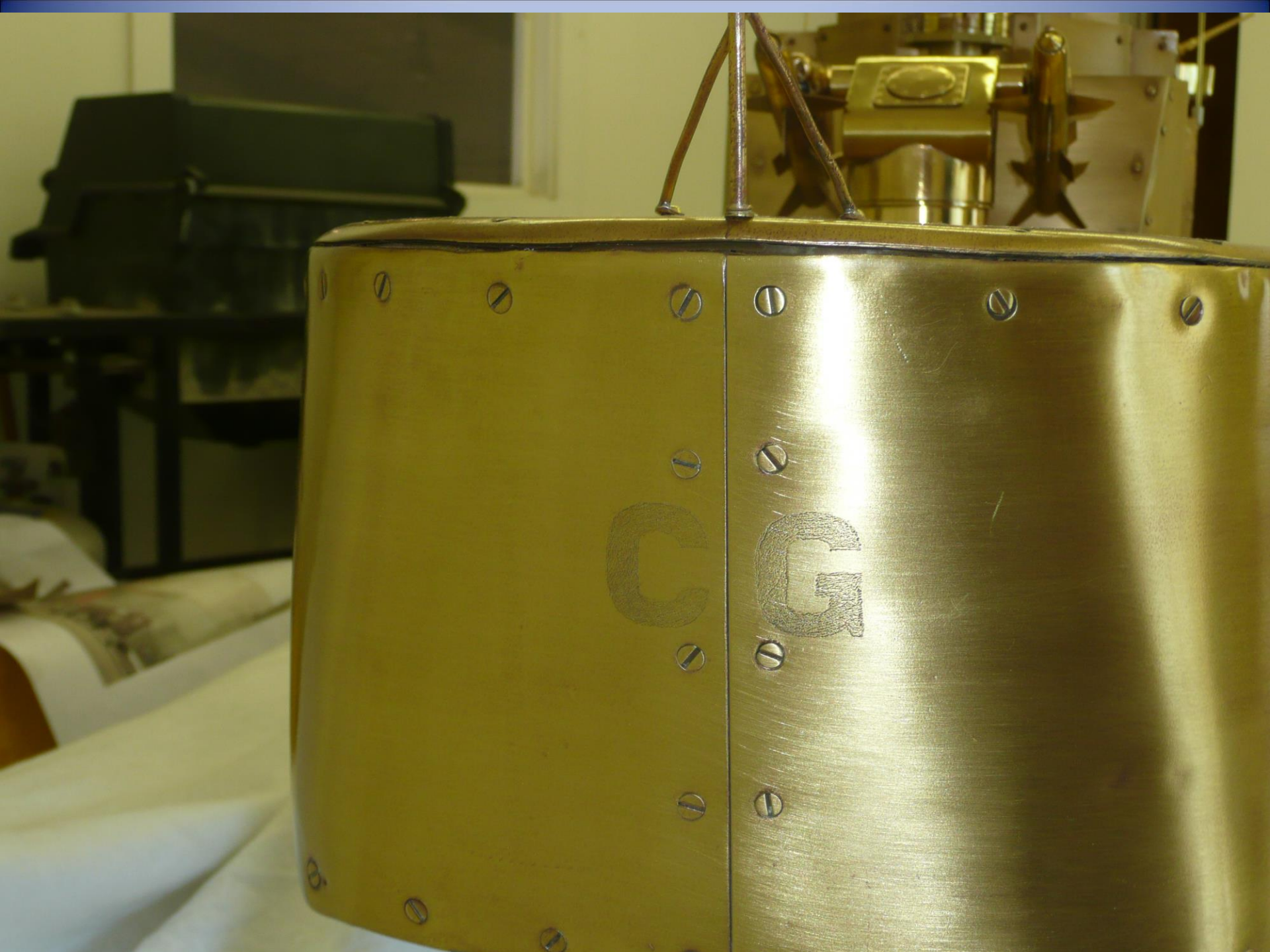




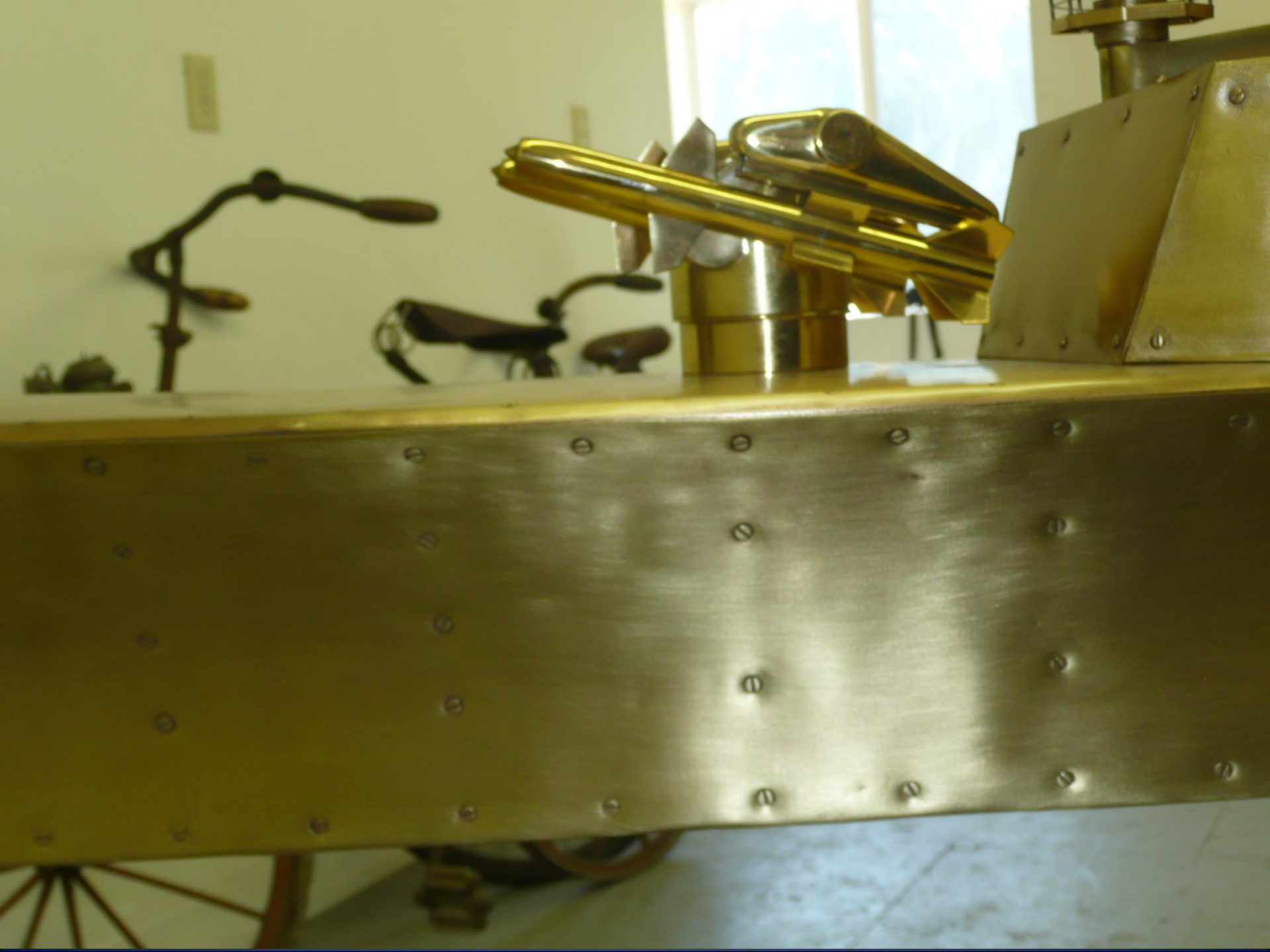




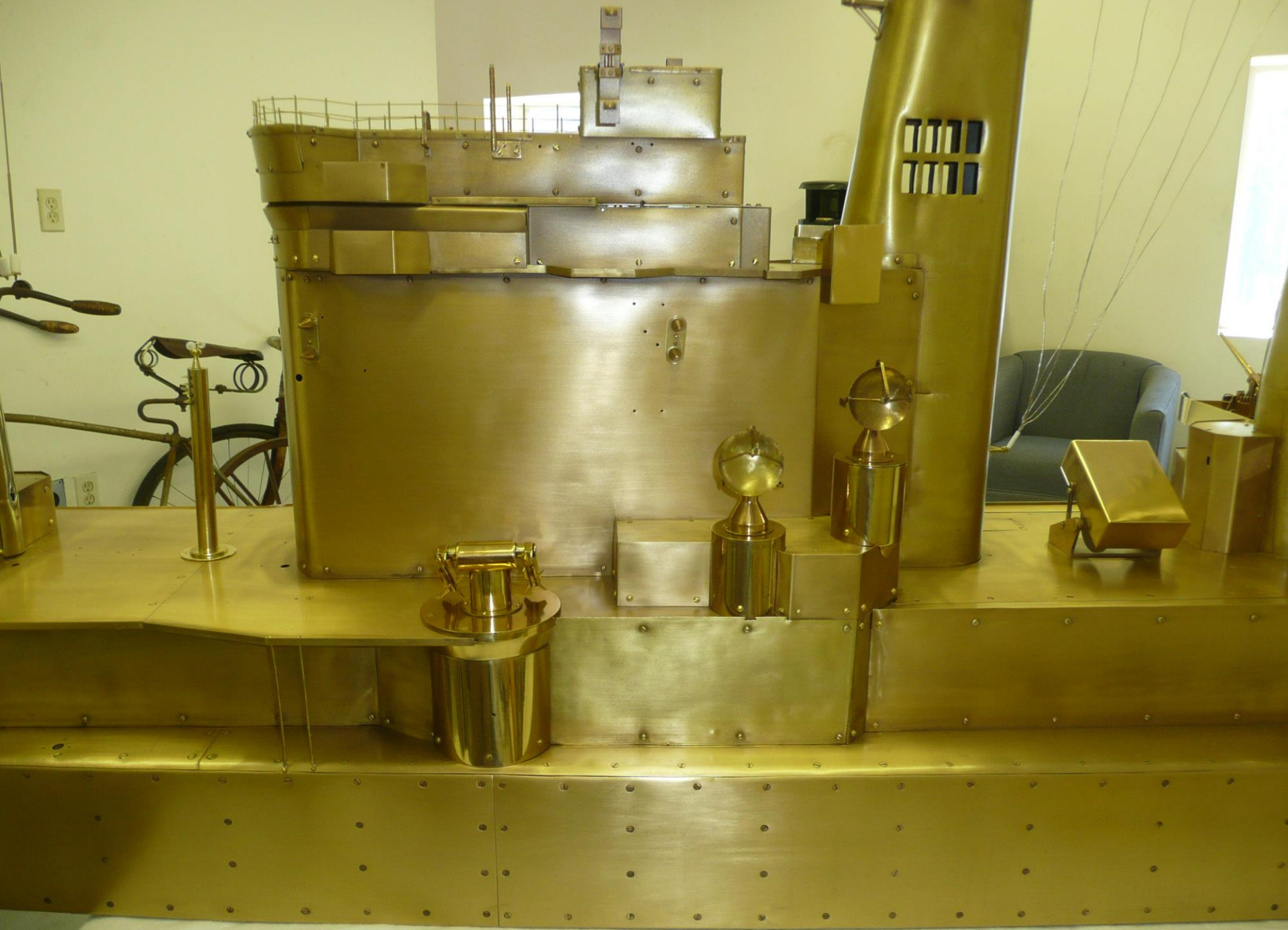






















Model delivered to Creatacor, a Design/Build facility in New York, July 2013



Installation at Visitor's Center



Installation Complete



Views of new display and quarterdeck area modifications



US Navy, CG-10 Class Brass Test Model

CG-10 CLASS BRASS TEST MODEL HISTORY AND BASIC TESTING PROCEDURE

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SPAWAR Systems Center PACIFIC

WELCOME
USS ALBANY

- The next 3 slides are “before and after” views of the model.

CG-10 Class Model on turntable



June 2009



April 2013



Recognition pages

- A project of this magnitude is not the result of just a few people or one organization. In the following pages we would like to recognize various organizations and staff for all of the cooperation and support throughout the acquisition of the USS Albany test model.

SPAWAR

Space and Naval Warfare Systems

Center, Pacific

-

Mr. Ed Budzyna

Mr. Stephen D. Russell, Ph.D.

Ms. Jodi McGee

Mr. Mike McGinnis

SPAWAR

Space and Naval Warfare Systems Center, Pacific

Model Shop Staff

- *Jun Peralta, Engineering Technician
Brass Model Maker*
- *Benton Wong, Engineering Technician
Brass Model Maker*
- *Daryl Von Mueller, Electronic Technician*

US Navy Legal Dept

- Ms. Diana King
Asst. Counsel
SSC Pacific Office of Counsel

US Navy Sub Base Pt. Loma

- Commodore Brett Genoble
 - Lt. James Clark
 - Seaman Charles Thompson
 - *Alicia Aviles Gateway Inn Supervisor*
-
- *Special thanks to:*
 - Captain Paul Jaenichen

San Diego, CA Members

- Bill Sperberg
- Rick Booke
- Bob Rominger

Chandler Packaging

- Richard Lutz

Hilddrup Moving & Storage, Inc

- Brad Payne
- Charles McDaniel, President

Warehouse & Rehab Space

- Owners of the former LB Furniture Industries manufacturing facility have donated space for the storage and rehabilitation of the model.

Metal Magic

- Ed Libitzki – owner
- Provided storage and working space as well as performed various cleaning and polishing tasks for over 3 years.
- Initiated PR for completed model.

City of Albany, New York & Albany County Convention & Visitors Bureau



- Mayor Gerald D. Jennings
- Ms. Michele L. Vennard, President/CEO
- Ms. Kathy Quandt, Director of Operations

USS Albany Heritage Exhibit Committee

- Aldo Bursi
- Susan Cleary
- Al Malcomson
- Norman R. Nilsen

Other people to thank

- Jay Schrand, President, USS Chicago Association
- Dick Desrochers
- Senator John McCain and his staff
- Wayne Dove, who recommended the trucking company
- Jim Window

Contributor's Plaque

9 September 2013

USS ALBANY CG-10 CLASS BRASS MODEL DEDICATION

The USS Albany Association Heritage Exhibit recognizes those who have supported this historical project and helped bring it to reality.

This five year project can only be realized & appreciated through the brass model display that represents the heritage of all shipmates that have served aboard as well as its namesake city, **ALBANY**, the Capital of New York State.

We sincerely hope that the restoration efforts of many along with the information will provide you with the historical values that it represents.

Sincerely,

Restoration Project & Heritage Exhibit Committee

MAJOR SUPPORTERS

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in addition to

[illegible]

CA-111 SUPPLEMENT

[illegible]

00-07-1986

[illegible]

CONTRACTS: 100-1000000000

[illegible]

ASSOCIATE, NEW BRUNSWICK

Source: U.S. Census Bureau, *Marriage, Divorce, Remarriage in the 1990s*, 1995.

ON-PHASE CONFINEMENT

[illegible]048114 Springer

1997-1998	1998-1999	1999-2000
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MAJOR SUPPORTERS

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Albany County Convention & Visitors Bureau
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CREATACOR, Inc.
Donald G. Risch
Ed Libitzki, Metal Magic Inc.
Exhibit Chairman, Wayne V. Van Amburgh
Hilton Garden Inn Albany Medical Center
J.N. Boone Family
James E. McGrew Jr. Cabinetmaker
Jerome & Anne Trupiano
Master Chief Leslie E. Dorr, USCGR Retired
Project Manager, Barton E. Hutchins
US Navy Cruiser Sailors Association, Inc
US Navy, SPAWAR Model Division
USS Albany Association, Inc.

IN MEMORY OF

Merle M.	Bontrager	CG-10	1963-66
Kenneth	Dubin	CG-10	1962-66
David A.	Hutchins	CA-123	1957-58
Peter Martin	Homa	CG-10	1976-79
Lee E. J.	Laughlin		Wife of John Laughlin
Donald R.	Led Duke		BBL Inc, Principal
Leo J.	Marc-Aurele	CA-123	
		CG-10	1956-58 & 1962-67
Felix & Patricia	Perkowski		Parents of Judith P. Van Amburgh
Richard A.	Zeimet	CG-10	1968-71

CA-123 SHIPMATES

Louis E.	Amico, Sr.	1956-58
Edmund G.	Benjamin	1951-54
Raymond G.	Benjamin	1949-53
James E.	Brogan	1951-52
Trueman E.	Bryer	1947-48
Harry J.	Crosby	1955-56
Richard H. & Earlene	Desrochers	1956-58
Donald J.	Ertel	1951-55
Raymond W.	Evans	1946
Marvin A.	Haase	1956-57
Robert D.	Henning	1948-49
John J.	Laughlin	1950-55
Harold C.	McGurk	1954-57
Gary G.	Miller	1955-57
James F.	Naughton	1952-56
Robert W.	Pruitt	1955-58
Samuel A.	Pusateri	1956-58
Robert T.	Rapp	1954-57
James S.	Renfro	1953-55
Charles H.	Roman	1953-55
Gene L.	Shuttleworth	1952-57
Charles R.	Sienkiewicz	1951-53
Rollin G.	Stralo Jr.	1952-56
William D.	Vance	1951-52

SSN 753 Shipmates

Capt. Paul N.	Jaenichen, USN Retired	1999-2002
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CG-10 SHIPMATES

Andrew J.	Berg	1977-80
Robert D.	Boyle	1975-77
James H.	Buckalew	1962-64
Richard T.	Buric	1962-64
Ira B.	Cortez	1962-67
Robert H.	Francois	1969-72
Carmine	Gibaldi	1968-69
Kenneth D.	Hallock	1969-72
Barton E.	Hutchins	1968-70
Steven A.	Johnson	1965-67
Timothy T.	Keagle, Sr.	1962-64
Capt. Michael A.	Kubishen, USN(Ret)	1968-70
Gary A.	Kurutz	1968-70
Robert F.	McConnell	1962-64
John F.	McGaffey, Jr.	1963-67
Edward L.	Miles, Jr.	1965-67
Steven A.	Mlady	1970-71
Douglas B.	Quelch	1969-71
Donald W.	Risch	1962-64
Bert B.	Rogers	1977-79
Douglas D.	Rose	1962-64
Clark S.	Stone	1976-79
James A.	Van Alstyne	1963-66
Wayne V. & Judy	Van Amburgh	1962-64
Robert E.	Walker	1964-67

HONORARY MEMBERS

Naomi Bontrager
Nick Boulas
Catherine R. Brindle
Aldo Bursi
Carol Dubin
Helen Homa
Shirley Hutchins
Judith P. Van Amburgh
Rose M. Zeimet

ASSOCIATE MEMBERS

Ryan & Megan Engelhardt

OUTSIDE CONTRIBUTORS

BBL Charitable Foundation Inc.
Capt. Allan P. Slaff, USN Retired
CREATACOR, Inc.
Ed Libitzki, Metal Magic Inc.
Hilton Garden Inn Albany Medical Center
J.N. Boone Family
James E. McGrew Jr. Cabinetmakers
Jerome & Anne Trupiano
Master Chief Leslie E. Dorr, USCGR (ret)
Mr. & Mrs. J. Kevin Rooney
Norman E. Lindroth
Ryan W. Van Amburgh
US Navy Cruiser Sailors Association, Inc
US Navy, Spawar Model Division

Special Thanks to

- Ed Libitski and Metal Magic – cleaning, polishing and finishing of model
- Bart Hutchins for serving as project manager, negotiating the original contract and personally recreating numerous parts and pieces and installing them on the model.
- Wayne VanAmburgh – Securing a display location and serving as on site project manager for the display aspect of this project as well as keeping accurate records of the financial aspect of the project
- Jim McGrew – made the base cabinet for the model as well as the seals and banner for the wall display
- Creatacor and Rich Hennegan – new display design, installation and modification of existing display and quarterdeck area

Thank you !!!!

We would like to thank the board of directors and the membership for their support and confidence.

It was a very eventful and rewarding opportunity to reclaim this piece of USS Albany class history . It is our hope that it will be an inspiration to others and an educational experience for many.

Media Links

<http://www.wabi.tv/news/40769/two-local-men-restore-piece-of-navy-history>

<http://www.timesunion.com/local/article/Restore-to-former-glory-4781813.php>

<http://www.timesunion.com/local/article/Exhibit-celebrates-ships-4800200.php>

- <http://www.cbs6albany.com/news/features/top-story/stories/brass-replica-uss-albany-display-at-heritage-area-visitors-center-10775.shtml>
- <http://bangordailynews.com/video/orland-man-helps-preserve-navy-history-3/>