A Proposal, On Behalf of the Orleans Historical Society, to Obtain a $50,000 Grant in order to Comprehensively Restore the Historic CG36500 Motor Lifeboat

Elizabeth Nickerson, ENGL 379 **Tuesday, December 15, 2015**

The Orleans Historical Society
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Jeffrey Reinbold
Assistant Director, National Maritime Heritage Grant Program
National Park Service
1849 C Street NW
Washington, DC 20240

Tuesday, December 15, 2015

Dear Mr. Reinbold,

I am writing to you, on behalf of the Orleans Historical Society to formally submit a grant proposal for the amount of $50,000. This grant would furnish a comprehensive restoration of the CG36500 Gold Metal Motor Lifeboat. The CG36500 was instrumental in the famous 1952 rescue of 32 men from the SS *Pendleton* and is a piece of Coast Guard history. Today, the Orleans Historical Society maintains the CG36500 as a "floating museum," educating the local community about the history of the Cape Cod lifesaving service.

The Orleans Historical Society's CG36500 Operations Manager, Robert Ryder, has determined that the boat's all-wood interior is suffering from water damage, an assessment that has been confirmed by local boat-building experts. If the problems with CG36500's interior are not addressed soon, it is likely that the boat will rot out and become unfit for public display.

The Orleans Historical Society believes that such a restoration of the CG36500 is feasible. Robert Ryder and professionals from Big Bay Hull and Gaff are working collaboratively to determine the best course of action. The Orleans Historical Society is also prepared to seek additional funding, in the event that the proposed restoration costs more than anticipated.

The faculty of the Orleans Historical Society thanks you very much for your time and consideration as they undertake this project.

Sincerely,

Elizabeth Nickerson
The Orleans Historical Society

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1. Statement of the Problem

The proposed project would serve to restore the CG36500, Gold Metal Lifeboat. The CG36500 is owned and operated by the Orleans Historical Society, a 501(c)(3) non-profit organization. The CG36500 is a 36-foot, all-wood decommissioned coastguard motor lifeboat. It was built in 1946 at Curtis Bay, Maryland Coast Guard Yard. On February 18th, 1952, the CG36500 was deployed by the Chatham coastguard and was instrumental to the historic rescue of the crew of the SS *Pendleton*.

1.1 Background

The SS *Pendleton*, a 503-foot, 10,488 gross ton T2 tanker, had split in half about 50 miles off the coast of Chatham, MA. While the bow-half of the *Pendleton* sank immediately, the stern-half retained steerage and electricity, preserving the lives of 33 crewmen. When the Chatham Lifeboat Station (CLS) spotted the stern-half of the *Pendleton* on their radar, Officer in Charge, Bos'n Cluff, ordered the dispatch of the CG36500 in pursuit of the surviving *Pendleton* crew. BM1 coxswain, Bernard Webber captained the CG36500 with a volunteer crew of three: Engineman Andrew Fitzgerald, Seaman Richard Livesey, and Seaman Irving Mask.

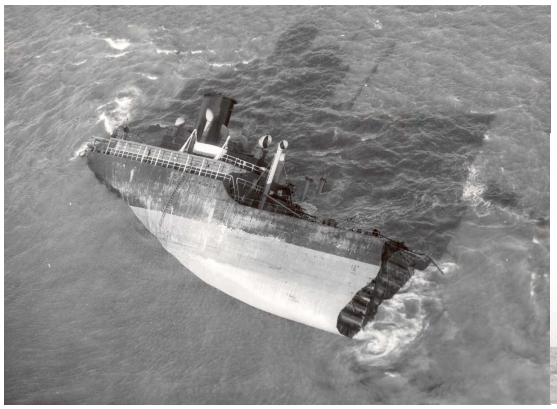

Fig. 1.1 The SS *Pendleton*, stern

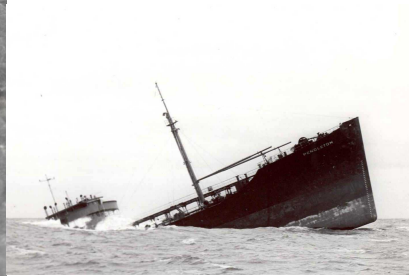

Fig. 1.2 The SS *Pendleton*, bow

The mission seemed impossible. To reach the *Pendleton*, Webber and his crew would have to pilot the CG36500 over the dangerous Chatham bar in the midst of a full-scale "Nor'easter," complete with blinding snow and 60-foot seas. Assuming that they did not first wreck on the bar, the CG36500 crew would then have to motor through the storm, until they found the *Pendleton*. Then, if the coastguardsmen did locate the *Pendleton*, they would have to safely board its crew of 33, despite the fact that the CG36500 only had room for 8 other passengers. Knowing full well the futility of the situation, Webber, Fitzgerald, Livesey, and Mask departed from Old Harbor, Chatham.

Webber brought the CG36500 over the bar by throwing its engine into reverse every time a wave tossed the self-righting boat into the air. After hours of motoring through the Atlantic, Webber finally sensed something in the distance. He instructed a crewman to operate the boat's searchlight, which illuminated the stern of the *Pendleton*, writhing in the sea. The CG36500 crew could barely make out a black mass of figures atop the starboard side of the *Pendleton*'s stern. Suddenly, a Jacob's ladder descended from the *Pendleton* and the vessel's crew began to clamber down it. Webber and his crew assisted the *Pendleton* men, lifting them out of the water or catching them as they were pitched off the ladder.

The CG36500 returned with 32 of the 33 *Pendleton* crew. Overstuffed with "human cargo," CG36500 labored its way back to Old Harbor. When Webber radioed the CLS to inform them of the rescue's status, his report was met with awe and exhilaration. The day after the rescue, Rear Admiral H.G. Bradbury, Commander of the First CG District sent his congratulations to Webber, Fitzgerald, Livesey, and Mask. He informed the CG36500 Coastguardsmen that the stern of the *Pendleton* had capsized just moments

after they boarded its crew. The miraculous rescue couldn't have come a moment too soon. Webber and his crew were all awarded the Treasury department's coveted Gold Lifesaving Medal for their actions during the *Pendleton* rescue.

Fig. 1.3 Chatham Coast Guard saves 32 Men from S.S. *Pendleton*, Feb. 18, 1952

1.2 Definition of the Problem

In 1968, the CG36500 was officially decommissioned. For almost 15 years, it was stored, uncovered, behind the office of the Cape Cod National Seashore. By the time the Orleans Historical Society acquired CG36500 in 1981, the boat had fallen into serious disrepair.

Fig. 1.4 CG36500, Wellfleet, MA, 1981

The Orleans Historical Society organized a volunteer effort to save the CG36500, and within 6 months an initial restoration was complete. This first restoration involved extensive overhaul of the hull as well as repair of the CG36500's 44 foot twin diesel engine. Because this first restoration was performed and funded entirely by volunteers, it only scratched the surface in terms of the work needed to preserve the boat.

Fig. 1.5 Orleans mechanic, Harvey Murphy, and the CG36500's 44 foot twin diesel engine

Fig. 1.6 Chatham resident, Don Horne, scraping paint off the CG36500

A second restoration effort was made in 1996 at Pease Boat Works in Chatham. This restoration involved maintaining the structure of the hull from the keel up to the rails.

While this second restoration was crucial to preserving the structural integrity of CG36500, it left much to be desired. The ribs, turtlebacks (cabins), and cockpit sole have

not been touched since 1981, when they were first refinished. Like the hull, these structures will rot out and become structurally unsound unless they are preserved. Moreover, much of the original interior hardware has been uninstalled. This includes, but is not limited to: running lights, compass, and spotlight. Much of this hardware is necessary for the CG36500 to operate legally in U.S. waters. Additional safety features like VHF radio are also imperative for CG36500 to operate legitimately.

1.3 Evaluation of State-of-the-Art Equipment or Techniques for Solving the Problem

The problems with CG36500's interior are solvable. The rotting ribs and bulkheads can be patched and sealed with epoxy. In order to access the structural elements of the boat, the cockpit sole will need to be dismantled and then refit, replanked, and refinished.

The turtlebacks will probably need to be rebuilt entirely. During the 1996 restoration, they were sheathed in fiberglass. Instead of preserving the structure of the boat, the fiberglassing actually trapped water in the turtlebacks, exacerbating the rot that was already there. Failure to rebuild the turtlebacks would likely cause rot to spread to other parts of the boat. CG36500's original turtlebacks were double planked and sheathed in canvas. The best option would be to keep this double plank design, but to then cold mold the second layer of planks and sheath everything in marine epoxy, creating a watertight seal.

Final cosmetic work will involve restoring and replacing CG36500's internal hardware. Although much of the original hardware has been uninstalled, it is still available. The Orleans Historical Society possesses the original spotlight, bell, and

running lights. With some minor electrical work, the spotlight and running lights should again become operable. Instillation of a VHF radio will also be possible at this stage.

2. Statement of Request

The Orleans Historical Society believes the CG36500 to be of such significance that it should not be ignored. Today, the *Pendleton* rescue is commonly referred to as the "greatest small boat rescue in Coast Guard history." Additionally, the CG36500 is the last boat of its kind that is still operable. As the Orleans Historical Society puts it, "the Motor Lifeboat CG36500 is nothing short of a floating museum." Fittingly, it is one of few small craft vessels to be listed on the National Register of Historic Places.

Based on past restorations, the Orleans Historical Society is confident in their ability to fund and execute this project. In 1996, the Orleans Historical Society obtained a grant for $30,000 from the Fred J. Brotherton Charitable Foundation in order to partially restore the CG36500 at Pease Boat Works. The Fred J. Brotherton Charitable Foundation provided this grant on the basis that the Orleans Historical Society would match their donation. To achieve this, the Orleans Historical Society attained additional funding from several small organizations, including the Cape Cod 5 Charitable Foundation, American Legion Post 308, and the Cape Cod Coast Guard Academy. The Orleans Historical Society also receives alternative donations from local businesses. Nauset Marine provides annual winter storage for the CG36500, free of charge. Chatham contracting company, Dubis & Sons donates their shed for CG36500's annual volunteer maintenance. Wayne Freeman, of Brewster Welding, contributed his expertise during CG36500's first

restoration by rebuilding the boat's engine room. Occasionally, Whitely Fuel of Chatham also provides complementary services.

A complete restoration of CG36500's interior would preserve the historic vessel for the foreseeable future. A grant for the amount of $50,000 would serve to complete the following parts of the restoration:

- Replacement of the rotting bulkheads and ribs
- Rebuild of the turtlebacks
- Replacement and refinishing of the cockpit sole
- Refurbishment and reinstallation of all relevant hardware

In the event that a complete restoration costs more than anticipated, the Orleans Historical Society is prepared to seek additional funding from the aforementioned beneficiaries, thus ensuring the completion of the project. A $50,000 grant would support a timely restoration, to be completed by May 1st 2017, at which time the CG36500 has been invited to participate in two noteworthy events. The first is the decommissioning ceremony of the 44301 Coast Guard Lifeboat. The 44301, which served the Chatham Coast Guard, is the last 44-foot lifeboat to be used in active Coast Guard service. The second event is the annual Wooden Boat Show, which will be held this summer in Mystic Seaport, Connecticut.

3. Description of Proposed Work

3.1 Objectives

- A. To replace all decaying structural elements of the CG36500, especially the bulkheads and the ribs

- B. To rebuild and cold mold the turtlebacks
- C. To replank and refinish the cockpit sole
- D. To refurbish and reinstall all relevant hardware as well as provide final cosmetic work

3.2 Methods

To complete the proposed work, the Orleans Historical Society plans to collaborate with Orleans boat-building business, Big Bay Hull and Gaff. Owner, Tamsen Leahy, has generously donated her time and shop space in order to furnish this restoration. Mrs. Leahy plans to employ Big Bay Hull and Gaff's team of senior boat builders on this project. (For more information about Tamsen Leahy and her crew, please see *5. Personnel*). CG36500 Operations Manager, Robert Ryder, has also agreed to donate his time, whenever he is available.

The Orleans Historical Society possesses the original blueprints for CG36500. Cooperatively, Mr. Ryder and Mrs. Leahy have already begun to assess the status of CG36500 and are planning a restoration that will honor CG36500's historical design.

Mr. Ryder and Mrs. Leahy have proposed to that the following work be undertaken:

A. To patch and replace all decaying structural elements of the CG36500, especially the bulkheads and the ribs

A.1 Bulkheads

A bulkhead is a vertical partition that attaches to the hull and deck. It is a structural element common to almost all boats. Typically, bulkheads are held in place

with small pieces of fiberglass along with a series of bolts. On CG36500, there are 5 bulkheads, all of which must be replaced.

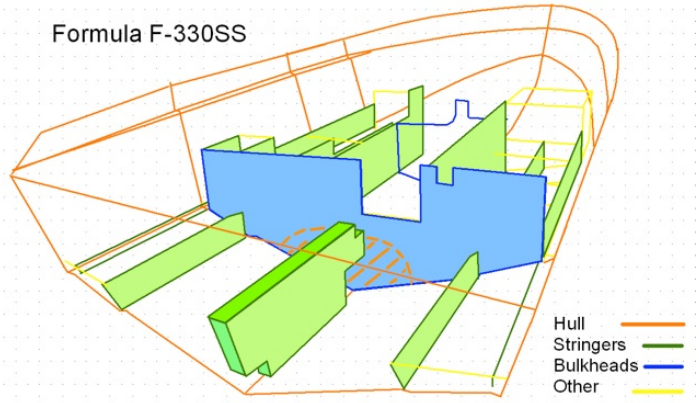

Fig. 3.1 Plans for a Formula 330 SS Thunderbird

A RotoZip saw will be used to cut the existing bulkheads free from the hull. With a high performance-sanding disc, the old fiberglass tabbing will be removed from the hull and parts of the deck. The original bulkheads, in conjunction with CG36500's blueprints, will be used to draw and cut new ones. For the new bulkheads, Tamsen Leahy has advised the use of ¾" Okoume marine plywood. To cut the new bulkheads, a reciprocating saw with a 6-inch carbide-coated blade will be used. These new bulkheads will then be finished with a random dual action sander. At this point, the new bulkheads may be installed using a preliminary layer of epoxy.

To finish reattaching the new bulkheads to the hull, a series of holes will be drilled in the bottom of each bulkhead and through the floor of the frame. Stainless steel bolts will be inserted into these holes, along with a coat of reinforcing epoxy. 2 sets of strips of 738 Biaxial fabric will then be used to tab the bulkheads into place. The first set of strips will have 60% of their cloth on the bulkhead, while the second set of strips will have 60% of their cloth on the hull. This staggered layering of fiberglass cloth will ensure that the bulkheads stay secure.

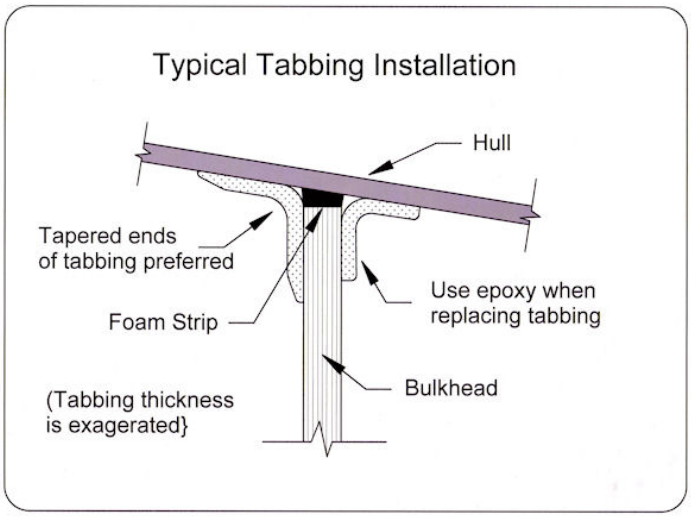

Fig. 3.2 Typical fiberglass tabbing installation

A.2 Ribs

"Ribs" are a boat's skeleton. Specific to wooden boats, ribs are a series of bent, hardwood boards that give a boat its shape. Like bulkheads, ribs are an essential structural component.

Fig. 3.3 Wooden Ribs for the Big Trimaran from Hartley Boats

Experts at Big Bay Hull and Gaff will do initial tests to determine which of CG36500's ribs show signs of rot. Removing the rotten ribs is a two-step process. First,

the original copper rivets which hold the ribs in place must be removed, manually. Next, the ribs themselves can either be removed by hand or with the aid of a RotoZip saw.

Once the rotten ribs have been removed, new ribs will be constructed out of oak and cut with a table saw. Once the new ribs are ready to install, they will be bent to fit CG36500's existing frame. This will be done using a steam box; steaming oak makes it flexible. Mrs. Leahy will perform this stage of the restoration. Bending oak is a traditional boat-building technique, which takes some experience. After the new ribs have been shaped, they will be reinstalled with copper rivets.

B. To rebuild and cold mold the turtlebacks

The CG36500 has three rounded compartments, more commonly referred to as turtlebacks. CG36500's turtlebacks are located fore, aft, and amidships. The framework of the turtlebacks is created by a collection of ribs. Originally, these ribs were covered with two layers of butt jointed cedar planks and attached with bolts. An intermittent layer of canvas separated both layers of cedar, while a second layer of canvas covered the exterior of each turtleback.

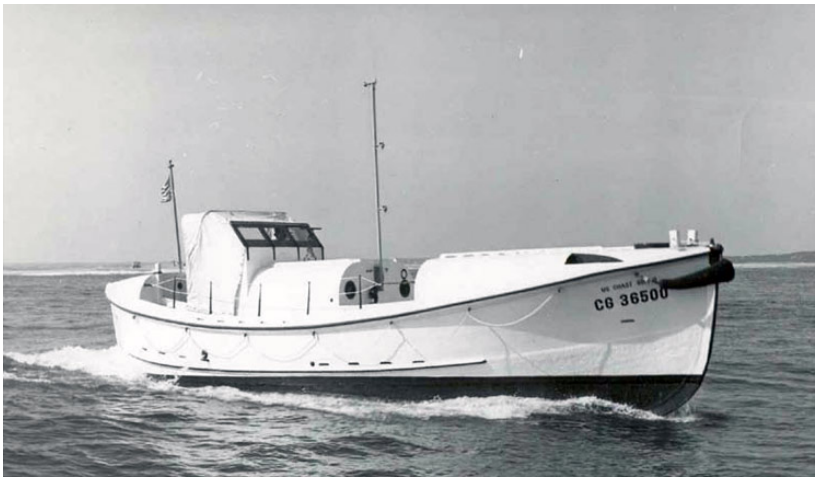

Fig. 3.4 CG36500's turtlebacks, fore, amidships, and aft

During the 1996 restoration, the turtlebacks were covered with a layer of fiberglass. While the intention was to preserve the turtleback's original structure, this second fiberglassing actually intensified rot within the framework. To eradicate this rot, the turtlebacks must be dismantled and then rebuilt. To dismantle the turtlebacks, the exterior layer of fiberglass will be ground down with a sander, enough so that the underlying bolts are visible. These bolts will then be removed, using a bolt extractor, thereby loosening the original cedar boards from the frame.

Mrs. Leahy has suggested that the turtleback's double layer design be kept. The first layer will be cut from boards of Atlantic white cedar and installed using bolts. The second layer will be constructed from thin boards of Spanish cedar veneer. This layer will be comprised of 2 sub-layers, installed diagonally across one another. Each sub-layer will be cold molded, a process which involves sealing the wood with epoxy. This will result in a strong monocoque structure that will behave similar to fiberglass. Finally, the exterior of each turtleback will be fitted with Dynel cloth and sealed with a final layer of epoxy. Dynel cloth is a thin sheet of fiberglass, which behaves like fabric until it is installed.

Fig. 3.5 Cold molding at the WoodenBoat School in Maine

C. To replank and refinish the cockpit sole

The cockpit sole refers to the floor of the boat. Although the original cockpit sole is in acceptable condition, it must be removed in order to accesses the bulkheads and the ribs. After the structural renovations are complete, a new cockpit sole will be fit, installed, and refinished.

A crowbar will be used to separate the original cockpit sole from the frame. The new cockpit sole will be cut from boards of VG Douglas fir, using a table saw. The boards will then be installed, using a combination of nails and epoxy. Finally, the new cockpit sole will be finished with 6 coats of Interlux Compass Clear varnish.

D. To refurbish and reinstall all relevant hardware as well as provide final cosmetic touches

The following hardware will be reinstalled on CG36500: running lights, bell, spotlight, compass, and VHF radio. The Orleans Historical Society possesses CG36500's original running lights, bell, and spotlight. Once professionally cleaned, these structures will again become operable.

The running lights and spotlight will be reinstalled, using a wiring procedure standard to all boats. 14 and 16 gauge copper wire will be run from the lights to a battery within the boat's engine room. These wires will then be sealed with liquid electric tape.

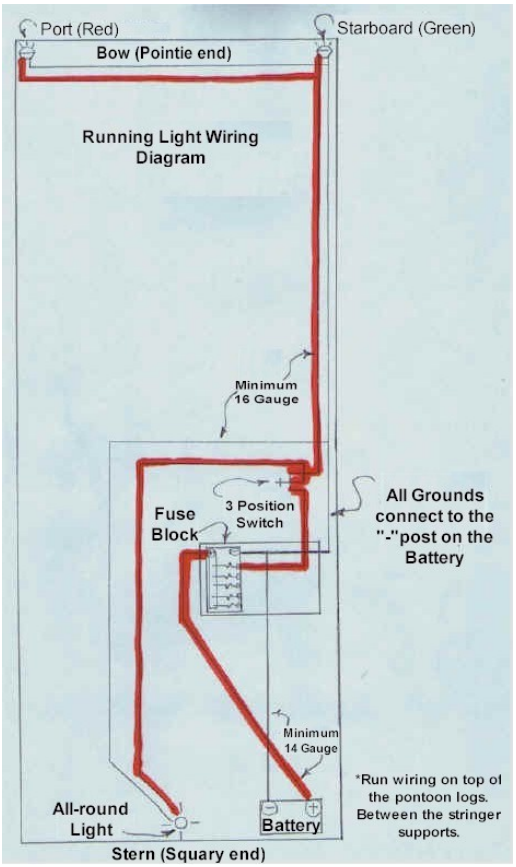

Fig. 3.6 A typical running light installation

Fig. 3.7 CG36500's running lights

A mounted VHF radio will be installed using a similar wiring process. Once installed, the radio will be calibrated by following its system prompts. The bell and compass will both be installed with screws. Because CG36500's original compass was destroyed, it will be replaced with a black, deck-mount Explorer compass. While fully functional, this new compass will also be discreet.

The CG36500 will be finished above the waterline with 2 coats of white Interlux Brightside One-Part Polyurethane Paint. Below the waterline, the CG36500 will be finished with 3 coats of black Interlux Micron CSC Antifouling Bottom Paint.

At this time, final cosmetic touches may be applied. This will include the reinstallation of CG36500's black MS lettering. Accessories like fenders, buoys, and extra line may also be included during this process.

3.3 Schedule

Month	Work to be Completed
November, 2016	• Move the CG36500 from Rock Harbor to Big Bay Hull and Gaff • Set up CG36500 on stands inside of shop • Uninstall all existing hardware • Strip all interior paint and dismantle the cockpit sole and the turtlebacks • Remove the existing bulkheads
December, 2016	• Isolate areas of rot • Remove all rotten ribs • Cut and finish new oak ribs
January, 2017	• Bend and install the new ribs • Cut and finish new bulkheads from ¾" Okoume plywood • Install the bulkheads
February, 2017	• Cut and install the first layer of the new turtlebacks with Atlantic white cedar • Cut and finish the second layer of the turtlebacks with Spanish cedar veneer
March, 2017	• Cold mold the second layer of the turtlebacks • Sheathe all the turtlebacks with Dynel cloth and finish with epoxy • Fit, cut, and install the new cockpit sole with VG Douglas fir
April, 2017	• Clean, repair, and install all hardware • Finish cockpit sole with varnish • Apply paint above the waterline • Bottom paint • Complete final cosmetic work
May 1st, 2017	• Move the CG36500 onto the Nauset Marine trailer • Launch CG35600 at Rock Harbor

Fig. 3.8 Project timeline

3.4 Discussion of Alternatives

For each element of the proposed restoration, Robert Ryder and Tamsen Leahy have explored alternatives. They believe that these conjunctive alternatives will be ineffective at providing a comprehensive restoration of the CG36500.

One such alternative would be to avoid replacing the bulkheads. While the bulkheads are less rotten than the ribs, they will still need attention within the coming

years. This points toward a future restoration, which the Orleans Historical Society hopes to avoid. Another consideration was to cut the bulkheads from cheaper plywood, such as marine-grade Douglas fir. Although it would be cost-effective, Douglas fir is more susceptible to rot than Okoume plywood. Because Okoume plywood is treated with WBP melamine glue, it will rot far less quickly than Douglas fir. Again, the choice to use Okoume plywood is indicative of a comprehensive restoration.

The problems with CG36500's ribs cannot be ignored. Unless the ribs are replaced soon, the boat will collapse in on itself. Tamsen Leahy and Robert Ryder have made the choice to replace the ribs, but not to sister them. Sistering wood involves reinforcing the original board with a parallel piece of wood or metal. Although sistering the ribs would provide additional support, this technique is not original to CG36500's design. In order to complete a historically accurate restoration, CG36500's ribs cannot be sistered. Moreover, replacing the ribs themselves will provide enough structural repair that sistering them would be irrelevant.

CG36500's turtlebacks must be rebuilt. The use of Atlantic white cedar for the first layer of the turtlebacks is true to the vessel's original design. The choice to use Spanish cedar veneer for the second layer was made in light of the fact that this layer will be cold molded. Were this second layer not to be cold molded, another layer of Atlantic white cedar could be used. Mrs. Leahy has advised that the turtlebacks be cold molded in order to prevent future rot. Not cold molding the turtlebacks would result in a problem identical to the current one. Cold molding the turtlebacks, which are already susceptible to water damage, is the only way to ensure that they will remain rot-free. Mrs. Leahy has also advocated that the turtlebacks be sheathed in Dynel cloth as opposed to canvas.

While CG36500's original turtlebacks were sheathed in canvas, the quality of canvas available in 1946 far exceeds the quality of canvas available today. New canvas sheathing would need to be replaced in 10 years. Canvas is also more likely to allow water into the turtleback's underlying boards. In order to avoid these problems, fiberglass Dynel cloth will be installed and then coated with epoxy, thereby creating a durable, watertight seal.

Although the cockpit sole is in acceptable condition, it must be removed in order for restorers to accesses the boat's structure. One alternative would be to carefully remove the cockpit sole, thereby preserving the original wooden boards. Upon restoration of the boat's interior, these boards could then be reinstalled and refinished. This alternative poses a similar problem to not restoring the bulkheads, in that if they are not restored now, then they will need to be restored later. Compared to other elements of this project, restoring the cockpit sole will be easy and inexpensive. Although the cockpit sole could be left out of this restoration, that decision seems imprudent.

In order for the CG36500 to operate legally, its hardware must be reinstalled. Although the purchase and installation of new hardware may pose fewer problems during the restoration, such a decision would be historically inaccurate. Since the Orleans Historical Society is fortunate to enough to possess CG36500's original hardware, acquiring new hardware seems superfluous. The decision has been made to include painting CG36500's bottom in the project's final cosmetic work. Although CG36500 is not scheduled for bottom painting this year, performing this routine maintenance with Big Bay Hull and Gaff is a wise decision, as it will deter this work for another year.

4. Description of Available Facilities

4.1 Equipment

- RotoZip SS560VSC-50 120-Volt RotoSaw+ Variable Speed spiral Saw Kit
- Dewalt reciprocating saw (DWE304)
- Dewalt DW4844 6in. carbide-coated reciprocating saw blade, coarse
- 3M random orbital sander
- Delta table saw, 10in. 5HP with 52in. table (36-L552)
- Brownwell sail boat stands, flat top 67”—85”
- Shop-Vac, 18gal. vacuum
- Craftsman 10-piece bolt/nut remover set
- Dewalt 18-gauge pneumatic 2in. brad nailer kit (DWFP12231)
- Stalwart 89-piece, 18-volt cordless drill set

4.2 Materials

- Brushes/rollers for varnish and paint
- Copper wire
- Plastic buckets for paint, varnish and epoxy
- Filters for varnish and epoxy

5. Personnel

5.1 Names, Positions and Relevant Backgrounds of Payrolled Employees

A. Robert Ryder, Orleans Historical Society, CG36500 Operations Manager

Robert Ryder has performed 25 years of active service with the U.S. Coast Guard. In 1994, Mr. Ryder joined the Orleans Historical Society as the CG36500 Operations Manager. Mr. Ryder was responsible for organizing the 1996 restoration of CG36500 at Pease Boat Works. He has also assembled a coalition of volunteers who perform CG36500’s annual upkeep. Mr. Ryder has been sailing since childhood, and can

competently execute routine boat maintenance and repairs. For this restoration, he will volunteer shop time with Big Bay Hull and Gaff.

B. Suzanne Cornell, Orleans Historical Society, Director

Mrs. Cornell is a former President of the New England Museum Association (NEMA) and has 33 years of museum leadership experience. Prior to her role Director of the Orleans Historical Society, Mrs. Cornell was Executive Director of the American Independence Museum in Exeter, NH, and the Manchester, NH Historic Association. In 2011, Mrs. Cornell joined the Orleans Historical Society.

C. Tamsen Leahy, Big Bay Hull and Gaff, Owner

From 1983 to 1993, Mrs. Leahy worked as a boat builder and spar fabricator for Beetle, Inc., a company that specializes in 12-foot catboats. In 1999 Mrs. Leahy opened Big Bay Hull and Gaff in Orleans, MA. Mrs. Leahy owns the patents on three classes of sailboat, which she designs, builds, and sells through Big Bay Hull and Gaff. These are the Classic Cat, the Baybird Sloop, and the Hurricane Sloop. Mrs. Leahy is a member of the Friends of Pleasant Bay and the Namequoit Sailing Association.

D. Brian Ingram, Big Bay Hull and Gaff, Senior Boat Builder

E. Doug Ahrenholtz, Big Bay Hull and Gaff, Senior Boat Builder

F. Seth Porter, Big Bay Hull and Gaff, Senior Boat Builder

5.2 Names and Positions of Remaining Staff

A. Elizabeth Nickerson, Orleans Historical Society, Principle Investigator (P.I.)

Elizabeth Nickerson is an undergraduate student at the University of Massachusetts-Amherst. She is an English Major, specializing in Professional Writing and Technical Communication. Ms. Nickerson is a volunteer grant writer for the Orleans Historical Society.

5.3 Relevant Publications of Payrolled Employees

Leahy, Tamsen. "Pleasant Bay Columns." *Epoxyworks* Issue #34. 18 June 2014.

6. Budget

6.1 Salaries of Payrolled Employees

Employee	$/Hour	Billable Hours	Total
Leahy, Tamsen	N/A	750	N/A
Ingram, Doug	$15.00	500	$7,500.00
Ahrenholtz, Seth	$13.50	500	$6,750.00
Porter, Brian	$12.25	500	$6,125.00
Ryder, Robert	$15.00	500	$7,500.00
Cornell, Suzanne	$20.00	100	$2,000.00
Subtotal		**2,500**	**$29,875.00**

Fig. 6.1 Salaries of payrolled employees

6.2 Estimated Cost of Materials

Item	# of Units	Cost/Unit	Total
Okoume plywood (10'x10'x3/4")	10	$147.40/bd.	$1,474.00
VG douglas fir (1'x6')	50	$5.81/bd.	$290.50
Atlantic white cedar (1'x10')	30	$3.22/bd.	$96.60
Spanish cedar veneer (1/8")	225	$6.90/sq. ft.	$1,552.50
White oak (2")	100	$26.95/bd.	$2,695.00
West System Epoxy	200	$35.04/qt.	$7,008.00
Dynel cloth	200	$8.97/sq. meter	$1,794.00
Deck-Mount Explorer Compass	1	$67.99	$67.99
Mounted VHF Radio	1	$182.78	$182.78
Interlux Compass Clear varnish	10	$22.99/qt.	$299.90
Interlux Brightside One-Part Polyurethane Paint, white	10	$37.99	$379.90
Interlux Micron CSC Antifouling Bottom Paint	2	$215.40/gal.	$430.80
40-grit grinders (6")	3	$55.73	$167.19
West System 738 biaxial fabric	1	$465.49/1,000sq. yd.	$465.49
Liquid electrical tape	16	$6.00/4oz.	$96.00
Sandpaper (assorted sizes)			$100.00
Stainless steel bolts (assorted sizes)			$150.00
Copper rivets (assorted sizes)			$100.00
Brushes/rollers (assorted)			$50.00
1 quart plastic buckets			$50.00
Filters			$50.00
Copper wire			$50.00
Cosmetic "extras"			$125.00
Subtotal			**$17,725.00**

Fig. 6.2 Estimated cost of materials

6.3 Remaining Expenses

Item	# of Units	Cost	Total
Summer 2016 dock fee (Rock Harbor)	36	$50.00/ft.	$1,800.00
Hauling fee (Nauset Marine)	36ft./3mi.	$8.00/ft.+$1.85/mi.	$600.00
Subtotal			**$2,400.00**

Fig. 6.3 Remaining expenses

7. Summary

7.1 Benefits of the Project

A comprehensive restoration of the CG36500 Motor Lifeboat would preserve this historic vessel for the foreseeable future. Maintained as a "floating museum," CG36500 would continue to honor the bravery of Station Chatham's Webber, Fitzgerald, Livesey, and Mask as well as Coastguardsmen throughout the ages. Moreover, it would testify to the assiduous spirit of the Lower Cape community who, through their own volition, continue to keep CG36500 afloat.

Once restored, the Orleans Historical Society could volunteer the CG36500 in countless events, promoting public interest in maritime history and the Cape Cod lifesaving service. In addition to docked tours of the CG36500, cruises on Cape Cod Bay could be organized for the summer months. The CG36500 could also be employed in offshore life-saving demonstrations as well as reenactments of the *Pendleton* rescue. One such reenactment was attempted several years ago by the Cape Cod Coast Guard Academy, however, due to the failing interior of the boat, it was unable to be completed.

These maritime education projects would not only serve the local community, but the public at large. This January, Disney is releasing *The Finest Hours*, a feature-length

film about the *Pendleton* rescue, starring Chris Pine. Based on local author, Casey Sherman's historical novel, *The Finest Hours* is an expected blockbuster. The Orleans Historical Society therefore anticipates that the CG36500 will be a popular tourist attraction this summer.

In order to complete a comprehensive restoration, the Orleans Historical Society has already lined up small grants from several local charities. Utilizing the fundraising experience of Director, Suzanne Cornell, the Orleans Historical Society believes that funding this project is feasible. An additional grant for the amount of $50,000 would serve to complete the proposed restoration by May 1st, 2017. Following restoration, the CG36500 will participate in the decommissioning ceremony of the historic 44301 Coast Guard Lifeboat. It will also appear in the celebrated WoodenBoat Show in Mystic Seaport, Connecticut.

7.2 Comparison to Other Projects

The Orleans Historical Society recognizes that there will be competition for funding. Regardless, the Historical Society believes that the CG36500 is of such historical significance that it should not be ignored.

The CG36500's use in the *Pendleton* rescue has forever marked its importance. Additionally, CG36500 is the only operable boat of its kind left in existence. For these reasons, it has earned a coveted place on the National Register of Historic Places.

Despite the Cape Cod National Seashore's advice to keep CG36500 as a stationary monument, the Orleans Historical Society feels that, for this vessel, an active retirement is more befitting. Colloquially known as "the little boat that could," the CG36500 belongs in operation.

7.3 Reassertion of the Seriousness of the Problem

Unless a final and comprehensive restoration of the CG36500 is performed within the coming years, it is likely that the boat's structure will rot beyond repair. After nearly 50 years of inattention, the vessel's bones have finally begun to fail. Lacking a stable interior, the CG36500 is almost unfit for public display. Once the structure of the boat officially fails, CG36500 will be permanently lost. A complete restoration would serve to reverse the irreparable decay and permanently preserve the CG36500.

7.4 Urge to Action

The CG36500 is a living piece of history. It commemorates the courage of the few while celebrating the resolution of the many. It also continues to educate the community about U.S. maritime history. A grant for the amount of $50,000 would serve to restore the CG36500, keeping these traditions alive. On a stormy night in 1952, the CG36500, along with its heroic crew of 4, saved the lives of 32 men. Today, The Orleans Historical Society extends an invitation to help save the CG36500.