

**THE THIRTIETH LEGISLATURE
APPLICATION FOR GRANTS
CHAPTER 42F, HAWAII REVISED STATUTES**

Type of Grant Request:

Operating Capital

Legal Name of Requesting Organization or Individual: DbA:
Pacific Fleet Submarine Memorial Association USS Bowfin Submarine Museum & Park

Amount of State Funds Requested: \$ 500,000.00

Brief Description of Request (Please attach word document to back of page if extra space is needed):
Pacific Fleet Submarine Memorial Association (PFSMA) is requesting funding for educational exhibits. USS Bowfin Submarine Museum & Park is undergoing a major renovation project is completely redesigning museum exhibits with a focus on STEM education, Hawaiian history, and gender equality. These exhibits will not only impact the more than 400,000 annual museum visitors, but they will provide local students with access to world-class STEM education opportunities and they will inspire a new generation to engage with science, technology, engineering, and math.


Amount of Other Funds Available:	Total amount of State Grants Received in the Past 5
State: \$ <u>215000</u>	Fiscal Years:
Federal: \$ <u>0</u>	\$ <u>215000</u>
County: \$ <u>0</u>	Unrestricted Assets:
Private/Other: \$ <u>6532000</u>	\$ <u>6532000</u>

New Service (Presently Does Not Exist): Existing Service (Presently in Operation):

Type of Business Entity:	Mailing Address:
<input checked="" type="checkbox"/> 501(C)(3) Non Profit Corporation	11 Arizona Drive
<input type="checkbox"/> Other Non Profit	City: State: Zip:
<input type="checkbox"/> Other	Honolulu HI 96818

Contact Person for Matters Involving this Application Charles K. Merkel Jr	
Name: Charles Merkel	Title: Executive Director
Email: executivedirector@bowfin.org	Phone: 8084231341

Federal Tax ID#: [REDACTED]	State Tax ID# [REDACTED]
--------------------------------	-----------------------------

	Captain Charles Merkel	1/11/19
_____ Authorized Signature	_____ Name and Title	_____ Date Signed

received
1/17/19 4:29pm DC

Application Submittal Checklist

The following items are required for submittal of the grant application. Please verify and check off that the items have been included in the application packet.

- 1) Certificate of Good Standing (If the Applicant is an Organization)
- 2) Declaration Statement
- 3) Verify that grant shall be used for a public purpose
- 4) Background and Summary
- 5) Service Summary and Outcomes
- 6) Budget
 - a) Budget request by source of funds ([Link](#))
 - b) Personnel salaries and wages ([Link](#))
 - c) Equipment and motor vehicles ([Link](#))
 - d) Capital project details ([Link](#))
 - e) Government contracts, grants, and grants in aid ([Link](#))
- 7) Experience and Capability
- 8) Personnel: Project Organization and Staffing


AUTHORIZED SIGNATURE

Charles Merkel
Executive Director PFSMA
PRINT NAME AND TITLE

1/18/2019
DATE



Department of Commerce and Consumer Affairs

CERTIFICATE OF GOOD STANDING

I, the undersigned Director of Commerce and Consumer Affairs of the State of Hawaii, do hereby certify that

PACIFIC FLEET SUBMARINE MEMORIAL ASSOCIATION, INC.

was incorporated under the laws of Hawaii on 12/22/1978 ;
that it is an existing nonprofit corporation; and that,
as far as the records of this Department reveal, has complied
with all of the provisions of the Hawaii Nonprofit Corporations
Act, regulating domestic nonprofit corporations.

IN WITNESS WHEREOF, I have hereunto set
my hand and affixed the seal of the
Department of Commerce and Consumer
Affairs, at Honolulu, Hawaii.

Dated: January 11, 2019

Director of Commerce and Consumer Affairs



**DECLARATION STATEMENT OF
APPLICANTS FOR GRANTS PURSUANT TO
CHAPTER 42F, HAWAII REVISIED STATUTES**

The undersigned authorized representative of the applicant certifies the following:

- 1) The applicant meets and will comply with all of the following standards for the award of grants pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant is awarded;
 - b) Complies with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
 - c) Agrees not to use state funds for entertainment or lobbying activities; and
 - d) Allows the state agency to which funds for the grant were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and ensuring the proper expenditure of the grant.

- 2) If the applicant is an organization, the applicant meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is incorporated under the laws of the State; and
 - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant is awarded shall be conducted or provided.

- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
 - b) Has a governing board whose members have no material conflict of interest and serve without compensation.

Pursuant to Section 42F-103, Hawaii Revised Statutes, for grants used for the acquisition of land, when the organization discontinues the activities or services on the land acquired for which the grant was awarded and disposes of the land in fee simple or by lease, the organization shall negotiate with the expending agency for a lump sum or installment repayment to the State of the amount of the grant used for the acquisition of the land.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

Pacific Fleet Submarine Memorial Association
(Typed Name of Individual or Organization)


(Signature) 1.10.2019
(Date)

Charles K. Merkel Executive Director
(Typed Name) (Title)

Public Purpose – Pacific Fleet Submarine Memorial Association

This grant will be used for a public purpose pursuant to Section 42F-102, Hawaii Revised Statutes.



Captain Charles K. Merkel
Executive Director

1/16/2019

Date

§42F-102 Applications for grants. Requests for grants shall be submitted to the appropriate standing committees of the legislature at the start of each regular session of the legislature. Each request shall state:

- (1) The name of the requesting organization or individual;
- (2) The public purpose for the grant;
- (3) The services to be supported by the grant;
- (4) The target group; and
- (5) The cost of the grant and the budget. [L 1997, c 190, pt of §3; am L 2014, c 96, §6]

Application for Grants

If any item is not applicable to the request, the applicant should enter "not applicable".

I. Certification – Please attach immediately after cover page

1. Certificate of Good Standing (If the Applicant is an Organization)

If the applicant is an organization, the applicant shall submit one (1) copy of a certificate of good standing from the Director of Commerce and Consumer Affairs that is dated no earlier than December 1, 2018.

2. Declaration Statement

The applicant shall submit a declaration statement affirming its compliance with Section 42F-103, Hawaii Revised Statutes. ([Link](#))

3. Public Purpose

The applicant shall specify whether the grant will be used for a public purpose pursuant to Section 42F-102, Hawaii Revised Statutes. ([Link](#))

II. Background and Summary

This section shall clearly and concisely summarize and highlight the contents of the request in such a way as to provide the State Legislature with a broad understanding of the request. Please include the following:

1. A brief description of the applicant's background;

The Pacific Fleet Submarine Memorial Association (PFSMA) is an IRS 501(c)(3) tax-exempt nonprofit organization formed in 1978. The PFSMA does business as the USS Bowfin Submarine Museum & Park at Pearl Harbor.

Forty years ago, the Pacific Fleet Submarine Memorial Association (PFSMA) was formed with the mission of telling the stories of our Silent Service, the men and women that comprise the US submarine force. A year later, the PFSMA acquired the USS Bowfin, a WWII submarine known as the "Pearl Harbor Avenger" and, by the end of 1980, the USS Bowfin Submarine Museum & Park was formed at Pearl Harbor.

The Pacific Fleet Submarine Memorial Association was created with the purpose of preserving and sharing the stories of submarine veterans. Due to the secretive nature of submarine warfare and the advanced technologies employed, the stories of submarine veterans are at great risk of being lost to history. As one of few submarine museums in the nation and the most visited

submarine museum in the world, the USS Bowfin Submarine Museum & Park is in a unique and indispensable position to give a voice to the Silent Service.

Along with the USS Arizona Memorial, the Battleship Missouri Memorial, and the Pacific Aviation Museum Pearl Harbor, the USS Bowfin Submarine Museum & Park completes the Pearl Harbor Historic Sites, a major tourist destination for the state of Hawaii. Since PFSMA's formation, over 9 million visitors have explored our campus and engaged with our history. Every year, over 400,000 ticketed visitors walk on the USS Bowfin or tour our museum.

In addition to maintaining the museum, PFSMA oversees a robust education program and multiple scholarship programs. PFSMA's full-time education staff coordinates student tours and classroom visits, while also producing materials for student engagement. PFSMA also oversees the USS Bowfin Memorial Scholarship program, which has awarded over \$900,000 to Hawaii-based submariners and their families since 1985. PFSMA recently established a partnership with the Hawaii Community Foundation to administer this scholarship. In 2018, PFSMA established a \$50,000 scholarship endowment with the Pauahi Foundation, which awards scholarships to Native Hawaiian students studying business or science.

PFSMA employs 79 full-time employees and had a net payroll of over \$2.1M in 2018. PFSMA paid \$164,185 in General Excise Tax and nearly \$189,916 in payroll taxes in 2018.

The USS Bowfin Submarine Museum & Park honors our veterans, educates our students, connects us with our history, and inspires us with stories of bravery, innovation, and sacrifice.

2. The goals and objectives related to the request;

After over 30 years as one of the State's most popular tourist destinations, the USS Bowfin Submarine Museum & Park needs to make improvements to continue serving our community and providing a top-quality education experience for local students.

In an effort to address our needs and expand our reach, the USS Bowfin Submarine Museum & Park is undertaking a renovation plan that will put a greater emphasis on STEM education, community stories, and equality in the submarine force. As part of this effort, the museum will be renamed the Pacific Fleet Submarine Museum at Pearl Harbor, which better reflects our scope and mission.

The new museum will be more accessible, more engaging, and it will have a much greater focus on education, with a large focus on STEM (Science, Technology, Engineering, and Mathematics) and interactive learning modules.

Our goal is to make our updated museum a catalyst for learning. We want local students to be inspired when they enter our museum and we want to give them the tools to continue their learning long after they leave. We want students to find science, technology, engineering, and math interesting and important; we want students to understand how their own culture shaped history; we want students to explore their curiosities and we want to give students the tools and

resources to do so. Through this project, we are creating a learning center for local students that will inspire and engage.

After walking through a dramatic, redesigned entryway, visitors will begin their journey in the moments after the attack on Pearl Harbor. In the first of three main galleries, visitors will learn about the role that submarines played in WWII. They will see artifacts from the era and interact with immersive displays that highlight the devastation of the attack and the US response. This will include interactive exhibits about how sonar and radar work, as well as firsthand accounts from those that experienced the attack.

As they enter the second museum gallery, they will learn about the role that submarines played in the Cold War. This section will focus on the technological developments and secrecy that defined the nuclear age. Visitors and students will engage with educational exhibits designed to teach how navigation, propulsion, and missiles work.

The third gallery will educate visitors about the present and future of the submarine force. This will include topics like Women in Submarines, Technological Engineering Innovations, and Future Submarine Designs. Meant to inspire, these forward-looking exhibits will put great emphasis on technology and science, highlighting how engineers and scientists are driving innovation. There will also be a great emphasis on how women have contributed to the Submarine Force since the first woman served on a submarine in 2011.

The entire museum will be filled with interactive games that require understanding principles like basic physics, thermodynamics, echolocation, and more STEM topics. For example, one exhibit will require students to fire a torpedo at a target using Newton's Second Law of Motion. Another exhibit will ask students to locate a submarine using radar and sonar. By providing a more interactive experience, students are more likely to continue engaging with these subjects.

The new museum will also include an outdoor classroom and an indoor multi-purpose learning center. Both of these rooms will be used to host visiting schools.

Through our STEM Teacher Advisory group, PFSMA is also working directly with local teachers to design exhibits and materials that will integrate with existing school curricula. By working directly with teachers, the Pacific Fleet Submarine Museum will be able to educate local students in a more effective, impactful way.

The current estimated cost of the renovation project is over \$20MM (\$13MM for construction and \$7MM for museum exhibits). To date, PFSMA has invested nearly \$3MM in the design of the renovation. PFSMA has saved over \$9MM in a capital investment fund to support this effort. The PFSMA board has committed \$6MM of this fund to support the renovation.

PFSMA is looking to a broad set of resources to fund this project and is submitting this Grant in Aid application to specifically request funding for the museum's educational exhibits. The current cost estimate for educational exhibits is \$7M and PFSMA is requesting \$500,000 (7% of the total cost) for the project.

3. The public purpose and need to be served;

As one of the most popular tourist destinations in Hawaii and the most visited submarine museum in the world, the USS Bowfin Submarine Museum & Park is central to educating people about Pearl Harbor, our State's history, and the sacrifices made by veterans. For most visitors and almost all of our student visitors, the museum also serves as an introduction to submarines and the science behind them, from new technologies to the engineering achievements that make the US Submarine Force the best in the world.

Every year, over 400,000 visitors and students from hundreds of schools visit the museum. From hosting local schools to international student groups, the museum and the ship are, in many ways, a living classroom. PFSMA hopes to better serve this audience by providing an educational experience that is more impactful and personal. Particularly for local students, PFSMA wants the new museum to be a catalyst for learning and a world-class resource for STEM education opportunities.

As part of the museum renovations, we are putting a renewed focus on STEM learning and interactive educational displays. The goal of emphasizing technology and engineering, as well as gender equality in submarines, is educating and inspiring the next generation to engage with science, technology, math, and engineering.

For Hawaiian students that often lack the educational resources of their mainland counterparts, exposure to STEM fields is particularly important.

The value of STEM learning is clear and nowhere is its impact more evident and obvious than in the progress made in submarine technology. By highlighting the role of these subjects and connecting them to interactive education exercises, the museum will help drive students to pursue careers in these fields. The Department of Commerce projects continued growth for STEM occupations and STEM workers currently command 26% more than their non-STEM counterparts.

By providing a state-of-the-art, interactive educational experience, the museum will attract more visitors and it will have a bigger educational impact on each one.

4. Describe the target population to be served; and

The target population is anyone visiting the museum, but particularly students from local schools. Everyone visiting the museum will interact with STEM learning modules and exhibits and we intend to make additional STEM learning materials and educational documents available for all visitors.

While all visitors will benefit from a more robust educational offering, local students will receive the greatest benefit from having access to state-of-the-art STEM education opportunities in their backyard. For the thousands of local students that visit the museum every year, these new

exhibits will serve as a catalyst for inspiration and as an engaging introduction to important STEM subjects. The inclusion of Hawaiian voices and stories in the museum narrative will also help students relate these themes back to their own lives.

Unlike many museums, which encourage students of a particular age to explore everything in one visit, we are creating a museum experience that encourages students to stay engaged throughout their youth. We want to help shepherd students through learning about the basics of submarines to studying the complexities of submarines. We want students and classes to visit us multiple times throughout elementary school and high school; we are creating a place that can provide learning tools for students of all ages and backgrounds.

Local schools and visiting students will also benefit from the Outdoor Classroom and the Multi-Purpose Learning Room. The Outdoor Classroom will be dedicated to hosting school visits and it will provide a classroom setting for student visitors. The Multi-Purpose Learning Room will be used as a classroom and as a place for meetings and temporary exhibits.

Additionally, the local community will benefit from increased attendance and engagement, which will encourage more contribution to the local economy.

5. Describe the geographic coverage.

Although we place a strong emphasis in serving Oahu, the Neighbor Islands, and the United States mainland, our target population is truly global. School groups, historians, veterans, military enthusiasts, tourists, government and civilian officials visit USS Bowfin Submarine Museum & Park from all over the world.

III. Service Summary and Outcomes

The Service Summary shall include a detailed discussion of the applicant's approach to the request. The applicant shall clearly and concisely specify the results, outcomes, and measures of effectiveness from this request. The applicant shall:

1. Describe the scope of work, tasks and responsibilities;

The renovation and expansion project is relatively straightforward in scope. While the broader renovation project will be funded largely by private donors, GIA funding assistance will cover the design, construction, and installation of the museum's educational exhibits.

The redesigned museum will contain over 50 exhibits that will educate visitors about the history of submarines, the technology behind submarines, and the people that serve on submarines. Intended to be both a primer for those unfamiliar with submarines and a lesson for those already knowledgeable about submarine history, the museum aims to educate every visitor.

The new exhibits, which are being designed and constructed by the architects that designed the USS Arizona Visitor Center, MIG-Portico, will have a large focus on STEM learning. Planned exhibits include interactive learning modules that explain how sonar, radar, and radio communications work, how engine and propulsion technologies evolved since the Cold War, how missiles and torpedoes work, and a variety of other exhibits that focus on science, technology, engineering, and math. These exhibits are being assembled by Jill Randerson Exhibit Management and, upon completion of museum renovations, the exhibits will be installed inside the museum.

To date, PFSMA has invested over \$3,000,000 in the design of the planned expansion and renovation. Construction Drawings have been approved by Naval Facilities Engineering Command, Hawaii (NAVFAC) and we have authorization to proceed with construction. On January 14th, 2019, PFSMA broke ground on the first phase of the project.

2. Provide a projected annual timeline for accomplishing the results or outcomes of the service;

January 14, 2019: Museum renovation groundbreaking.
Spring 2019: Finalize interior museum construction plans.
Spring 2019-Spring 2020: Exhibit fabrication.
Spring 2020: Exhibit installation.
April/May 2020: Project completion and reopening.

3. Describe its quality assurance and evaluation plans for the request. Specify how the applicant plans to monitor, evaluate, and improve their results; and

The museum is being developed, designed, constructed, and overseen by experienced museum professionals. The same architects that designed the acclaimed USS Arizona Memorial Visitor Center at Pearl Harbor, MIG-Portico, are designing the new museum. Jill Randerson Exhibit Management is managing the fabrication of museum exhibits.

PFSMA's Executive Director, Captain Charles Merkel, is overseeing the project and working with the PFSMA board to ensure that the project is adequately staffed and funded. This oversight will include selecting contractors, finalizing blueprints, monitoring construction progress, and the day-to-day work required to see this project to fruition.

The Museum Curator, Nancy Richards, and the Education & Outreach Coordinator, Charles Hinman, are working directly with the architects and exhibit designers to ensure that all exhibits meet the educational goals of PFSMA. As educational materials are developed and as new exhibit ideas arise, this education staff will also work with groups like the National Institute for STEM Education to ensure that exhibits are maximizing their educational effectiveness.

In order to evaluate and improve the effectiveness of exhibit and material designs, PFSMA has also assembled a STEM Teacher Advisory Group. This group will review all education materials

and initiatives to maximize their impact on local students. By working with local teachers from across Hawaii, PFSMA can effectively evaluate and adjust education programs to suite the evolving needs of students.

4. List the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency). The measure(s) will provide a standard and objective way for the State to assess the program's achievement or accomplishment. Please note that if the level of appropriation differs from the amount included in this application that the measure(s) of effectiveness will need to be updated and transmitted to the expending agency.

Because the ultimate goal is to engage, educate, and inspire visitors, effectiveness will be measured in a variety of ways over the course of the project.

During development and construction, effectiveness will be measured by tracking progress towards completion. PFSMA has hired qualified, experienced local contractors that have experience working on similar projects at Pearl Harbor Sites. Mason Architects and Griffith Construction Consultants will provide oversight during the renovation to ensure that standards are met. PFSMA's board and executive team will oversee construction.

Upon completion, PFSMA anticipate increased attendance, more school visitors, and a longer period of time that each visitor spends in the museum. This will be tracked using internal data about ticket sales. PFSMA will also work with museum specialists to assess and improve visitor satisfaction.

PFSMA will also work directly with schools, educators, the STEM Teacher Advisory Group, and STEM-certification groups to ensure that exhibits and materials are effective. PFSMA will continue to refine and improve education exhibits and materials until our educators are satisfied with their efficacy.

Before and after photographs, as well as all budgeting materials, will also help evaluate the effectiveness of this project. Photographs will be taken throughout the construction process and detailed budgets will be compiled and reviewed in real time by PFSMA staff.

IV. Financial

Budget

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.
 - a. Budget request by source of funds ([Link](#))
 - b. Personnel salaries and wages ([Link](#))

- c. Equipment and motor vehicles ([Link](#))
- d. Capital project details ([Link](#))
- e. Government contracts, grants, and grants in aid ([Link](#))

2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2020.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$125,000	\$125,000	\$125,000	\$125,000	\$500,000

3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2020.

PFSMA is working with Bank of Hawaii to secure an interest only \$15MM construction loan. Upon completion, this will roll into a \$4MM loan on a ten-year term and an \$11MM loan from the USDA Office of Rural Development.

PFSMA is also conducting a capital campaign to raise necessary funds. The campaign is appealing to individual donors, corporate donors, and foundations. We have already secured over \$500,000 in individual and corporate pledges. We also have pending requests with a variety of corporations and individuals. Today, our lead donors are Hawaiian Electric Industries, Bank of Hawaii, Home Market Foods, First Hawaiian Bank, Maui Divers Jewelry, and a few Hawaii-based individuals. PFSMA’s Board of Directors has also committed \$6,000,000 to the project.

PFSMA does not currently anticipate applying for any federal or state government funding during the next fiscal year.

4. The applicant shall provide a listing of all state and federal tax credits it has been granted within the prior three years. Additionally, the applicant shall provide a listing of all state and federal tax credits they have applied for or anticipate applying for pertaining to any capital project, if applicable.

None.

5. The applicant shall provide a listing of all federal, state, and county government contracts, grants, and grants in aid it has been granted within the prior three years and will be receiving for fiscal year 2020 for program funding.

PFSMA received a grant in aid from the State of Hawaii for the 2019 fiscal year. This grant in aid was for \$215,000 to make the campus ADA compliant. This request is unrelated to our current request.

PFSMA has not received any additional government funding.

6. The applicant shall provide the balance of its unrestricted current assets as of December 31, 2018.

Statement of Financial Position as of December 31, 2018 is attached.

V. Experience and Capability

1. Necessary Skills and Experience

The applicant shall demonstrate that it has the necessary skills, abilities, knowledge of, and experience relating to the request. State your experience and appropriateness for providing the service proposed in this application. The applicant shall also provide a listing of verifiable experience of related projects or contracts for the most recent three years that are pertinent to the request.

PFSMA has operated the USS Bowfin Submarine Museum & Park at Pearl Harbor since 1978. During this time, PFSMA has overseen routine maintenance ranging from minor building upgrades like the installation of solar panels to preserving the USS Bowfin.

For this renovation project, PFSMA selected MIG-Portico to lead the effort to expand USS Bowfin Submarine Museum & Park. MIG-Portico was the lead architect for the revitalization of the USS Arizona Visitor Center. They have brought on Jill Randerson Exhibit Management to manage the fabrication and installation of museum exhibits. MIG-Portico has also used a number of Hawaii-based architectural and engineering firms, including Mason Architects, Belt Collins Hawaii, Baldrige & Associates Structural Engineers, Mechanical Engineers of Hawaii, Coffman Engineers, and James Tucker Associates. MIG-Portico and their local partners are involved in the review and selection process for the contractor(s) that will perform the renovation process. Mason Architects and Griffith Construction Consultants will provide oversight during the renovation.

PFSMA's education team, Charles Hinman and Nancy Richards, are advising the design team and ensuring that educational goals are met. Mr. Hinman and Ms. Richards have over forty years of experience at the USS Bowfin Submarine Museum & Park. Mr. Hinman has coordinated the museum's education programming for two decades and has extensive experience working with schools and student visitors. Ms. Richards also holds a Masters in Museum Studies. This team will work with the STEM Teacher Advisory Group to ensure effectiveness.

2. Facilities

The applicant shall provide a description of its facilities and demonstrate its adequacy in relation to the request. If facilities are not presently available, describe plans to secure facilities.

USS Bowfin Submarine Museum & Park is located at Pearl Harbor immediately adjacent to the USS Arizona Memorial Visitors Center. USS Bowfin Submarine Museum & Park occupies approximately 3.8 acres of land that is leased from the U. S. Navy. This lease is administered by Naval Facilities Engineering Command, Hawaii. In May 2018, Naval Facilities Engineering Command and PFSMA executed a new 25-year lease.

The current campus comprises of:

- The USS Bowfin, a decommissioned WWII submarine that sits in Pearl Harbor;
- The Pacific Fleet Submarine Museum, a 9,000-square-foot museum dedicated to submarine history;
- A variety of outdoor exhibits including:
 - the Waterfront Memorial, which honors more than 3,500 submariners lost during WWII;
 - a Conning Tower, where visitors can explore the confined space of a WWII submarine;
 - a Kaiten, one of the only remaining Japanese manned torpedoes in existence;
 - a submarine rescue chamber; and,
 - over a dozen missiles, torpedoes, anchors, and propellers.
- Comfort Station (restrooms);
- Food court;
- Gift shop; and,
- Staff lounge and offices.

After the renovation, the museum will include:

- A completely reimaged museum with an additional 3,000 square-feet of museum space;
- An outdoor classroom;
- A Multi-Purpose Learning Space;
- Renovated Gift Shop and Support Facilities;
- An enclosure for the Kaiten, a rare Japanese manned torpedo; and,
- Rearranged and preserved outdoor exhibits.

VI. Personnel: Project Organization and Staffing

1. Proposed Staffing, Staff Qualifications, Supervision and Training

The applicant shall describe the proposed staffing pattern and proposed service capacity appropriate for the viability of the request. The applicant shall provide the qualifications and experience of personnel for the request and shall describe its ability to supervise, train and provide administrative direction relative to the request.

As of January 11th 2019, USS Bowfin Submarine Museum & Park has 79 full-time employees. A 15-member Board of Directors provide governance, strategic planning, and oversight. Our contacts and partnerships extend across a wide spectrum of community, national, and international relationships that have been forged over the years.

The PFSMA's Board of Directors is chaired by Captain Ronald R. Cox, USN (Ret.) who is currently the Vice President for Power Supply at Hawaiian Electric Company. Captain Cox is a leader in the community, serving as a Board Member of YMCA.

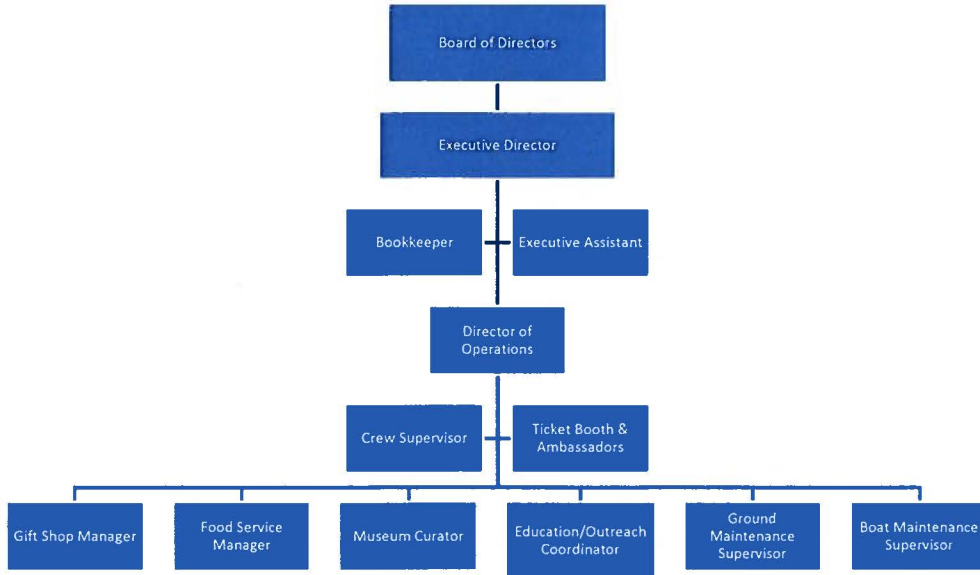
The Museum is led by Executive Director Captain Charles K. (Chuck) Merkel, USN (Ret.). Captain Merkel served on active duty in the U. S. Navy submarine force for 30 years and holds the distinction of being the first submarine Commanding Officer since World War II to lead his crew in combat on two successive deployments. Captain Merkel assumed the leadership of the Museum in May 2016. Captain Merkel served as Commanding Officer of a nuclear-powered submarine, a submarine training command and an operational joint command. His final active duty assignment was as the Director for Maintenance and Material Readiness for the Pacific submarine force. In this position, he supervised the day-to-day operation of all submarines operating in the Pacific fleet. As Executive Director, Captain Merkel is responsible to the Board of Directors for all aspects of operations at USS Bowfin Submarine Museum & Park.

The PFSMA Board of Directors specifically selected MIG-Portico to lead the effort to revitalize and expand the museum due to their involvement in the revitalization of the USS Arizona Visitors Center. MIG-Portico brought together a number of Hawaii-based architectural and engineering firms to assist in this effort. These local firms have been involved in completing the design, selection of contractors, and supervision of the construction.

The administration of education programming will be overseen by PFSMA education staff. Mr. Hinman, the Education Director, and Ms. Richards, the Museum Curator, each have over 20 years of experience running education programming at the museum. Ms. Richards holds a Masters in Museum Studies.

2. Organization Chart

The applicant shall illustrate the position of each staff and line of responsibility/supervision. If the request is part of a large, multi-purpose organization, include an organization chart that illustrates the placement of this request.



3. Compensation

The applicant shall provide an annual salary range paid by the applicant to the three highest paid officers, directors, or employees of the organization by position title, not employee name.

Executive Director: \$100,000
Director of Operations: \$64,487
Boat Maintenance Supervisor: 68,251

VII. Other

1. Litigation

The applicant shall disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgement. If applicable, please explain.

USS Bowfin Submarine Museum & Park is not a party to any pending litigation or subject to any outstanding judgement.

2. Licensure or Accreditation

The applicant shall specify any special qualifications, including but not limited to licensure or accreditation that the applicant possesses relevant to this request.

PFSMA has a long history of successfully operating the most visited submarine museum in the world. USS Bowfin Submarine Museum & Park completes the Pearl Harbor Historic Sites along

with the USS Arizona Memorial, the Battleship Missouri Memorial and the Pacific Aviation Museum Pearl Harbor. Naval History and Heritage Command provides oversight for the accountability and maintenance of artifacts on loan for PFSMA.

PFSMA has also hired MIG-Portico, a leading architecture firm with extensive experience at Pearl Harbor and other world-class museums, to design and oversee the project. Construction will be overseen by Mason Architects and Griffith Construction Consultants, both local firms with extensive experience.

3. Private Educational Institutions

The applicant shall specify whether the grant will be used to support or benefit a sectarian or non-sectarian private educational institution. Please see [Article X, Section 1, of the State Constitution](#) for the relevance of this question.

The grant will not be used to support or benefit a sectarian or non-sectarian private educational institution.

4. Future Sustainability Plan

The applicant shall provide a plan for sustaining after fiscal year 2019-20 the activity funded by the grant if the grant of this application is:

- (a) Received by the applicant for fiscal year 2019-20, but
- (b) Not received by the applicant thereafter.

The funds requested by this grant will be utilized to fund the one-time costs associated with the development and construction of educational exhibits. Once the installation of educational exhibits is completed, the cost of operation and maintenance will be covered by the normal annual revenue and budgeting process.

Pacific Fleet Submarine Memorial Association, Inc.

Statement of Financial Position

01/11/19

As of December 31, 2018

Accrual Basis

	Dec 31, 18
ASSETS	
Current Assets	
Checking/Savings	
10000 · Cash	
10650 · Cash - Change Fund	7,880.00
10900 · Vault Services	146,850.00
10100 · BH- Ops Fund - 040	-77,275.80
10200 · BH - Gift Shop - 059	308,787.00
10450 · BH - Combined Funds - 115	-275,291.75
10500 · Educational Endowments	845,555.45
10600 · Petty Cash	800.00
10700 · Cash - Investments	9,034,447.46
Total 10000 · Cash	9,991,752.36
Total Checking/Savings	9,991,752.36
Accounts Receivable	
16250 · Due from Rec.gov	65,715.00
16000 · Accounts Receivable	29,429.25
Total Accounts Receivable	95,144.25
Other Current Assets	
12800 · Prepaid Expenses	
12804 · Prepaid Lease - Naval Facility	53,088.04
12801 · Prepaid Insurance	87,417.33
Total 12800 · Prepaid Expenses	140,505.37
12500 · Inventory	207,107.86
Total Other Current Assets	347,613.23
Total Current Assets	10,434,509.84
Fixed Assets	
15600 · Computer Software	102,601.78
15000 · Fixed Assets (Furniture and equipment with useful life exceeding one year)	
15240 · Museum Renovation CIP	1,559,559.36
15100 · Building, Land & Museum	3,781,516.88
15200 · Future Capital Improvements	
15230 · Construction CIP	1,117,665.98
15225 · Construction in Progress	51,779.19
15200 · Future Capital Improvements - Other	527,973.05
Total 15200 · Future Capital Improvements	1,697,418.22
15300 · Submarine Museum	757,003.22
15400 · Furniture, Fixtures & Equipment	
15452 · Simplex - Fire Extinguishers	17,427.93
15451 · Leaf, LLC - Audio Headsets	99,000.00
15400 · Furniture, Fixtures & Equipment - Other	148,577.38
Total 15400 · Furniture, Fixtures & Equipment	265,005.31
15500 · Vehicles	27,996.98
15900 · Accumulated Depreciation	-3,698,521.49
Total 15000 · Fixed Assets (Furniture and equipment with useful life exceeding one year)	4,389,978.48
Total Fixed Assets	4,492,580.26
Other Assets	
16510 · Grant Receivable - Noncurrent	25,000.00
Total Other Assets	25,000.00
TOTAL ASSETS	14,952,090.10
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
20001 · Accounts Payable - OPS	2,699.09
Total Accounts Payable	2,699.09

Pacific Fleet Submarine Memorial Association, Inc.

01/11/19

Statement of Financial Position

Accrual Basis

As of December 31, 2018

	Dec 31, 18
Credit Cards	
20802 · Credit Card - Sam's Club	972.93
20800 · Credit Card - AMEX	11,778.45
Total Credit Cards	12,751.38
Other Current Liabilities	
20299 · Accrued Vacation	93,303.83
24300 · AFLAC Payable (Employee Premiums)	-108.52
22100 · Accrued General Excise Tax	18,316.26
24100 · Garnishment Payable	70.58
24200 · IRA Payable	13,093.76
21000 · Due from Combined Account	
21300 · Due to P.H.P	34,731.46
21200 · Due to P. H. Aviation Museum	163,648.70
21100 · Due to Missouri	492,778.73
Total 21000 · Due from Combined Account	691,158.89
Total Other Current Liabilities	815,834.80
Total Current Liabilities	831,285.27
Total Liabilities	831,285.27
Equity	
31000 · Temp Restricted Net Assets	240,775.40
30000 · Opening Balance Equity (Opening balances during setup post to this account. The balance of this acc...	1,183,255.37
30300 · Unrestricted Net Assets (Other Income)	12,046,649.38
Net Income	650,124.68
Total Equity	14,120,804.83
TOTAL LIABILITIES & EQUITY	14,952,090.10

BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2019 to June 30, 2020

App Pacific Fleet Submarine Memorial Assn.

BUDGET CATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Requested (d)
A. PERSONNEL COST				
1. Salaries				
2. Payroll Taxes & Assessments				
3. Fringe Benefits				
TOTAL PERSONNEL COST				
B. OTHER CURRENT EXPENSES				
1. Airfare, Inter-Island				
2. Insurance				
3. Lease/Rental of Equipment				
4. Lease/Rental of Space				
5. Staff Training				
6. Supplies				
7. Telecommunication				
8. Utilities				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
TOTAL OTHER CURRENT EXPENSES				
C. EQUIPMENT PURCHASES				
D. MOTOR VEHICLE PURCHASES				
E. CAPITAL	500,000			6,533,746
TOTAL (A+B+C+D+E)	500,000			6,533,746
SOURCES OF FUNDING		Budget Prepared By: 808 923 1341		
(a) Total State Funds Requested	500,000	<i>Charles Merkel</i>		
(b) Total Federal Funds Requested		Name (Please type or print)		
(c) Total County Funds Requested		<i>[Signature]</i>		
(d) Total Private/Other Funds Requested	6,533,746	Signature of Authorized Official Phone 1/15/2019		
TOTAL BUDGET	7,033,748	Date <i>Charles Merkel</i> Executive Director		
		Name and Title (Please type or print)		

BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES

Period: July 1, 2019 to June 30, 2020

Applicant: Pacific Fleet Submarine Memorial Assn. _____

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
N/A				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
TOTAL:				

JUSTIFICATION/COMMENTS:

BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2019 to June 30, 2020

Applicant: Pacific Fleet Submarine Memorial Assn.

DESCRIPTION EQUIPMENT	NO. OF ITEMS	COST PER ITEM	TOTAL COST	TOTAL BUDGETED
N/A			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				

JUSTIFICATION/COMMENTS:

DESCRIPTION OF MOTOR VEHICLE	NO. OF VEHICLES	COST PER VEHICLE	TOTAL COST	TOTAL BUDGETED
N/A			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				

JUSTIFICATION/COMMENTS:

BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2019 to June 30, 2020

Applicant: Pacific Fleet Submarine Memorial As

FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST	ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OTHER SOURCES OF FUNDS REQUESTED	FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2017-2018	FY: 2018-2019	FY:2019-2020	FY:2019-2020	FY:2020-2021	FY:2021-2022
PLANS						
LAND ACQUISITION						
DESIGN						
CONSTRUCTION		532000	700000			
EQUIPMENT						
TOTAL:		532000	700,000			
JUSTIFICATION/COMMENTS:						

GOVERNMENT CONTRACTS, GRANTS, AND / OR GRANTS IN AID

Applicant: Pacific Fleet Submarine Memorial Assn.

Contracts Total: 215,000

	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S. / State / Haw / Hon / Kau / Mau)	CONTRACT VALUE
1	Grant in aid (ADA Compliance)	FY 2019	State Legislature	State (HI)	215,000
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

**Pacific Fleet Submarine Memorial Association
Addendum**

**Addendum:
Breakdown of Museum Exhibit Costs**

	C03	MK37 Electric Torpedo		\$	5,350	
	C04	MK45 Nuclear Torpedo		\$	5,350	
	C05	Subroc Missile		\$	5,350	
	C06	Encapsulated Harpoon Missile		\$	5,350	
	C07	Future D5 Missile				Deleted allowance (future addition)
01M		Amphitheater				NIC
01W		Wayfinding		\$	37,000	2 site map, 2 other, 1 buses
2.0		THE SILENT SERVICE	\$133,100		\$128,770	
02A		SILENT SERVICE LEGACY				
	C01	The Silent service: intro graphics	\$9,700			
		Wall partition		\$	11,700	
		Artifact mounting; dolphins, cross		\$	3,450	
		F4 Headstone mount		\$	5,050	
		F4 Cross, Hat case		\$	3,650	
		Dolphin logos		\$	4,400	Added
	C02	Submariner Banners: banner graphics	\$13,500	\$	11,970	
	C03	Donor recognition	\$31,500	\$	10,300	
	C04	Sail with Graphics	\$37,300	\$	37,800	
02B		GALLERY ENTRIES				
	C01	Gallery entry: Unrestricted Warfare	\$4,800	\$	6,700	
	C02	Gallery Entry: Underway on Nuclear power	\$8,300	\$	8,300	
02C		Pride Runs Deep - NOW EXTERNAL PATROL				
	GG1	Pride Runs Deep: Graphics	\$9,800			
	C02	On eternal patrol: Graphics	\$8,500	\$	10,600	
	C03	Search for lost subs: Media Kiosk	\$9,700	\$	11,350	
02D	C01	Project Acknowledgements		\$	1,500	
3.0		AFTER PEARL HARBOR	\$391,874		\$1,201,699	
03A		Execute unrestricted warfare				
	C01	Attack Order	\$24,900		\$15,400	
03B		West to Empire				
	C01	Target Merchant shipping	\$15,700		\$27,450	
	C02	Identifying targets	\$12,500		\$46,263	
	C03	Failure of tactics, command - graphics	\$28,500		\$14,400	
	C04	Wahoo - graphics	\$33,200		\$38,400	
		Wahoo bell mount			\$1,500	Added
	C05	Submariners families (2)	\$37,700		\$76,800	
	C06	At Home	\$13,500		\$3,200	
03C		Capabilities and Tactics				
	C01	Bowfin model	\$32,000		\$31,200	
	C02	Bowfin virtual tour	\$9,600		\$14,000	
	C03	Torpedoes	\$58,800		\$52,500	
	C04	Radio/Sonar/Radar	\$72,200		\$99,000	
	C05	Diesel/Electric Propulsion	\$45,000		\$47,500	
	C06	Overhead curved graphics and panels	\$50,200			
03D		Crew Stories and Patrols				
	C01	War Patrols Intro	\$14,500		\$32,000	
	C02	Patrols: Life on War Patrol	\$61,700		\$57,700	
	C03	Patrols: Destroy Japanese Shipping	\$61,700		\$56,500	
	C04	Patrols: You're on Your Own	\$61,700		\$41,200	
	C05	Patrols: Special Missions	\$61,700		\$44,300	
		Wall case - Bowfin battleflag			\$15,930	Added
	C06	Crew Stories: Sub Culture	\$19,100		\$17,100	
	C07	Crew Stories: Japanese Souvenirs and POW's	\$19,100		\$15,500	
	C08	Crew Stories: Special Occasions	\$19,100		\$15,500	
	C09	Interactive Media: Crew life	\$9,700		\$14,500	Kiosk & A/V Hdw. Media and Integration In
	C10	Interactive Media: Great Sub Stories	\$9,700		\$14,500	Kiosk & A/V Hdw. Media and Integration In
	C11	Mission Interactive	\$59,200		\$14,500	
	C12	Patrols: Submarine Video	\$10,444		\$41,700	Infrastructure & A/V Hdw. Media & Integration In
	C13	Patrols: Returning to base	\$14,200		\$34,300	
	C14	Banner graphics above	\$13,500		\$36,500	
03E		The Impact: Breaking the Back				
	C01	Breaking the Back: Parche	\$57,100		\$65,500	
		Ratings blanket wall case			\$5,100	Added
	C02	Breaking the Back: Other successful subs	\$25,700		\$49,900	
	C03	Sub Rescue: Lifeguard league	\$18,230		\$30,900	Infrastructure & A/V Hdw. Media & Integration In
	C04	Cost and Loss	\$12,800		\$20,200	
		Medal of honor			\$4,600	Added
	C05	End of the War: Lockwood, Tokyo Bay	\$8,900		\$17,350	
03F		Kids Exploration Zone				
	C01	Kids Exploration Zone			\$78,000	
		5 benches			\$10,800	
		Interpretive graphics x 8	\$64,000			

4.0	UNDERWAY ON NUCLEAR POWER		\$741,920	\$1,076,710	
04A		Cold War			
	C01	Graphics		\$22,320	Walls by GC. Curved walls by exhibits
	C02	Cold War intro film	\$14,200	\$10,920	Infrastructure only, A/V Hdw. and media in admin
	C03	Learning from the last war		\$30,400	REVISED
	C04	Cold war fears (Duck and Cover)	\$17,200	\$13,360	
		CW brochures wall		\$2,500	Added
04B		Nautilus and Nuclear Subs			
	C01	Intro wall, Innovation and tech; Hydrodynamics		\$40,495	Graphics, video, models, artifacts, graphics
	C01	Early Cold War timeline	\$36,000		
	C02	Innovation and Tech: Interactive media		\$36,975	Kiosk, drives, projected/screen animation.
	C02	Nuclear power intro: Graphics and video	\$6,500		Infrastructure only, A/V Hdw. and media in admin
	C03	Nautilus model	\$21,650		
	G04	Nautilus at the pole	\$12,920		
	G05	Innovation and Tech: Nuclear Propulsion	\$47,200		
	G06	Innovation and Tech: Hydrodynamics	\$65,500		
	G07	Innovation and Tech: Interactive media	\$9,700		Kiosk only, A/V Hdw. and media in admin line
	G08	Thresher: SUBSAFE	\$19,100		
	G09	Shipyards and production	\$17,700		
04C		Cold War timeline			Was: Ballistic Missile Subs
	C01	Early cold war timeline - 1945 -60's	\$12,800	\$24,600	Was: Boomers and Fast Attacks: Graphic Intro
		Cases and mount adds		\$9,100	Added
	C02	Case:Nautilus at the pole	\$18,400	\$16,450	Was: 41 For Freedom Intro: graphics and video
	C03	Nautilus Video - was C02	\$22,400	\$4,070	
	C04	Cold war timeline - 1961 -89	\$44,000	\$20,190	Was: 4B -C09
		Cases added		\$10,600	Added
	C05	Thresher: SUBSAFE	\$44,000	\$40,635	Was: 4B-C08
	C06	Kamehamaha		\$58,265	Was: 4B-C03
		Kamehamaha model case		\$15,100	Added
	G06	Innovation and Tech: Interactive media	\$6,799		Kiosk only, A/V Hdw. and media in admin line
	G07	Launch Control Panels	\$19,199		
	G08	Driving a Nuclear sub	\$19,199		
04D		Fast Attacks and Boomers			
	C01	Boomers, Case, Video, Launch control panels,		\$57,700	Was:Sub Interior, bunk, locker, shower, drill, mess
	C02	Tech stn & I&T Missiles/Navigation , Nose cone		\$176,850	Artifact Case
	C03	Innovation and Tech: Interactive media		\$9,700	Crew stories: Interactive media
	C04	Driving a Nuclear sub, Control panels x 5		\$69,020	
	C05	Tech stn: Sonar, I&T sonar, I&T quieter		\$101,670	
	C06	Innovation and Tech: Interactive media		\$9,700	
	C07	Cat and Mouse interactive, Clandestine ops		\$27,310	
	C08	Missions Video		\$10,560	Was: Fast attack Intro video
	C09	Sculpin Graphics		\$2,750	
	C10	Guardfish graphics		\$2,750	
	C11	Batfish, graphics, case		\$29,370	
04E		Fast Attacks			
	G01	Fast Attack intro: graphics, video, skipjack	\$18,400		Infrastructure only, A/V Hdw. and media in admin
	G02	Innovation and Tech: Sonar	\$44,000		
	G03	Innovation and Tech: Quieter Running	\$44,000		
	G04	Innovation and Tech: Interactive media	\$9,700		Kiosk only, A/V Hdw. and media in admin line
	G05	Clandestine ops: Guardfish, Sculpin, Perehe	\$14,200		
	G06	Get and Mouse interactive	\$21,000		Infrastructure only, A/V Hdw. and media in Admin
04F		Crew life in Cold War			
	C01	Life on board intro: graphics		\$25,700	Added partitions
	C02	Menhaden Case	\$11,600	\$15,855	added second case
	C03	Crew stories: Interactive media	\$9,700	\$9,700	
	C04	Sub interior, case, Toddlers busy wall	\$74,300	\$138,225	Added for props etc
	C06	Earn your Dolphins: Interactive Media		\$9,700	Relocated
04G		Mini Theater			
	C01	Mini Theater Batfish and others	\$20,500	\$18,720	Infrastructure only, A/V Hdw. and media in admin
	G02	End of the Cold war—graphics	\$3,850		
	G03	Banner graphics above	\$13,500		
04H		End of the Cold War			
		End of the cold war: Graphics		\$3,850	Includes fin wall and graphics
5.0	TODAY'S SILENT SERVICE		\$363,800	\$408,900	Was:Sub Interior, bunk, locker, shower, drill, mess
05A	THE SUBMARINE FORCE IN TODAY'S WORKD				Artifact Case
	C01	Sub Roles & Missions today: Graphics & Video	\$47,500		Infrastructure & A/V Hdw. Media in admin line.
	C01	Curved structure - timeline graphics		\$ 51,300	
		Harry potter case		\$ 2,050	
		Clean sweep broom case		\$ 6,500	
		Tomahawk Fragment mount			
		Louisville case & artfcats		\$ 14,100	

	2 videos		\$	9,100	Gear and mount
	Graphics units (vertical panels at case)		\$	10,600	
C02	Modern Weapons - D5 Missile mock up	\$95,000	\$	89,000	
	Missile graphic		\$	3,300	
	MK48 Torpedo mount and graphic		\$	7,500	
C03	SSN's	\$25,000	\$	11,600	
	Case		\$	14,100	
	SSN feature models		\$	18,900	
	Surfboard protective panels		\$	4,200	
C04	SSBN's	\$27,000	\$	10,500	
	Case		\$	11,600	
	SSBN Feature models		\$	24,600	
C05	SSGN's	\$28,500	\$	9,900	
	Case		\$	14,100	
	SSGN Feature models		\$	36,900	
C06	Crew stories: Interactive media	\$9,700	\$	11,050	Infrastructure & A/V Hdw. Media in admin line.
C07	Today's Submariners- jobs on board: graphics & video	\$29,700	\$	19,900	From 05C - C01 Infrastructure & A/V Hdw. Media
	Video		\$	5,200	Gear and mount
C08	Polar Missions	\$22,400	\$	4,600	
	Case and artifacts		\$	9,950	
	Millwork		\$	8,200	
	Benches		\$	4,700	
05B	CHANGING EXHIBITS AREA				
C01	Future of the force: Graphics, artifacts, models, video	\$30,500	\$	30,800	Infrastructure & A/V Hdw. Media in admin line.
C02	Inspiration: Projects and Research;		\$	15,300	millwork, posting wall
C03	Imagine future subs: Video and millwork		\$	12,500	millwork, pscreen housing
C04	Visitors idea wall		\$	9,400	millwork, posting wall
C05	Innovation cart x 2		\$	17,800	Self-guided LED program
	Remus cradle with graphic		\$	6,650	
06G	The Submariner Community				
G01	Today's Submariners- graphics, artifacts	\$25,000			
G02	Earn your Dolphins: Interactive media	\$9,700			
C03	Banner graphics above	\$13,500			
6.0	EXTERIOR EXHIBITS	\$771,800			
06A	Memorial				Now 01D - C01
	Interpretive graphic	\$10,000			
06B	Lanal				
	Interpretive graphics x 3	\$7,500			Now 01F - C01
06C	Bowfin				
	Entry graphic	\$10,000			Now 01G - C01 & 2
06D	Subs through WW2				
	Interpretive graphics x 10	\$80,000			Now 01J
06E	Deterrence: Submarine weapons				
	Interpretive graphics x 8	\$64,000			Now 01L
	TOTAL	\$ 5,467,534	\$	5,910,712	108%
	Fabrication Bond - 2%	\$109,351		\$118,214	
	Contingency - 15%	\$820,130		\$886,607	
	Escalation - 2% per year	\$218,701		\$118,214	Changed to 1 year
	Allowance for taxes	\$0		\$0	Assume tax exempt
	GRAND TOTAL	\$6,615,716	\$	\$7,033,748	

Assumptions:

1. Power distribution and exhibit lighting in GC scope