

**Papahānaumokuākea Marine National Monument**  
CONSERVATION AND MANAGEMENT Permit Application

**NOTE: *This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).***

**ADDITIONAL IMPORTANT INFORMATION:**

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.
- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.
- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

**INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED**

Send Permit Applications to:

Papahānaumokuākea Marine National Monument Permit Coordinator  
6600 Kalaniana'ole Hwy. # 300  
Honolulu, HI 96825

[nwhipermit@noaa.gov](mailto:nwhipermit@noaa.gov)

PHONE: (808) 397-2660      FAX: (808) 397-2662

**SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.**

## **Papahānaumokuākea Marine National Monument Permit Application Cover Sheet**

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

### **Summary Information**

**Applicant Name:** Dr. Kelly Gleason

**Affiliation:** Papahānaumokuākea Marine National Monument

**Permit Category:** Conservation and Management

**Proposed Activity Dates:** 8/1/2014-7/31/2015

**Proposed Method of Entry (Vessel/Plane):** Vessel and Plane

**Proposed Locations:** Nihoa, Mokumanamana, Lisianski, Laysan, French Frigate Shoals, Pearl and Hermes Atoll, Midway Atoll, Kure Atoll, Maro Reef, Gardner Pinnacles

**Estimated number of individuals (including Applicant) to be covered under this permit:** 11

**Estimated number of days in the Monument:** 50

**Description of proposed activities:** (complete these sentences):

a.) The proposed activity would...

This activity aims to achieve goals to manage, interpret and protect maritime heritage resources in PMNM. In 2014 work may include maritime heritage efforts during an annual research cruise, in addition to a two week expedition to Midway Atoll.

Annual PMNM maritime heritage resource management activities conducted during a cruise will fulfill Monument management activities including: 1) non-invasive wreck site assessment survey of selected maritime heritage sites and 2) continued monitoring of known shipwreck and sunken aircraft sites for the purposes of understanding impacts and changes to maritime heritage sites. The first activity is a detailed investigation of a single wreck or archaeological site and will assist in the creation and distribution of important outreach and education products related to maritime heritage sites that will aid in interpretation, protection and preservation of the significant site and the continued development of PMNM maritime heritage themed exhibits and other outreach products; the second activity will work to test archaeological, observational and ecologically based methods of interpreting and monitoring maritime heritage sites in the NWHI.

Activities to be conducted during a two week expedition to Midway Atoll (via charter plane) will focus primarily on survey and exploration including 3) ground truthing of selected dive targets

for potential shipwreck and sunken aircraft sites at Midway Atoll relative to the Battle of Midway; 4) exploration for new maritime heritage sites through non-invasive remote sensing survey (magnetometer) and/or snorkeler towboard survey of high potential wreck site areas and 5) the collection of high definition video and photographs for the development of 3D images of sunken aircraft sites at Midway Atoll. The third and fourth activities at Midway Atoll describe efforts towards broader searches for previously un-located and undiscovered resources and allows for identification and inventory of maritime heritage sites. The final activity to create 3D images will help to accomplish specific outreach objectives as described in the PMNM Maritime Heritage Research, Education and Management Plan.

b.) To accomplish this activity we would ...

This project is part of a continued effort to conduct maritime heritage management activities in the Monument including exploration for new sites that will contribute to the PMNM inventory (an ONMS annual Maritime Heritage performance measure requirement), and documentation and interpretation of known maritime heritage sites. Comprehensive non-invasive assessment surveys of previously located wreck sites allow managers to compile an inventory of critical and non-renewable maritime heritage resources. Of the possible 126 shipwreck and historic aircraft lost in the area, 21 have been confirmed by field investigation. To date, surveys of twelve of these 21 have been completed in the NWHI. Maritime heritage summaries of site surveys are available at <http://www.papahanaumokuakea.gov/maritime/welcome.html> and upon request to the Monument Maritime Heritage Coordinator. A simple low impact technique known as “baseline trilateration” is used to map wreck sites (see Methods).

Monitoring activities will be conducted in 2014 utilizing archaeological, observational, and environmental parameters. The annual assessment and monitoring of maritime heritage sites for change is an important component of long term protection. The 2009 and 2010 surveys conducted by Derek Smith on shipwreck sites in the Monument helped to establish an important baseline dataset to advance interdisciplinary monitoring efforts at maritime heritage sites in the NWHI. Efforts in 2012 by Susie Holst of NOAA's CRCP helped to develop parameters for monitoring activities that will help to inform the investigation of such issues as the effects of climate change on heritage sites.

c.) This activity would help the Monument by ...

2014 maritime heritage project data (site survey, outreach product development, exploration, and monitoring) will contribute to the management inventory for the PMNM, as well as provide the program invaluable material for ongoing education and outreach efforts. Monitoring work at maritime heritage sites in 2014 will assist managers in better understanding the interaction between these sunken sites and the ecosystem, as well as help to develop an understanding of their structural integrity. 2014's monitoring efforts at shipwreck sites will continue a project initiated in 2009 and will assist in better understanding the changes occurring at these sites. Certain data generated by the survey is sensitive and will be protected from unregulated public distribution as determined by the PMNM (also see NHPA section 304). Maritime heritage survey

will be conducted in compliance with the appropriate preservation regulations (National Historic Preservation Act, Archaeological Resources Protection Act, Antiquities Act, Sunken Military Craft Act et al) and satisfies federal and state mandates for heritage resource inventory of controlled waters.

**Other information or background:**

The 2014 maritime heritage survey is a multidisciplinary project including efforts to further inventory and assess shipwreck sites in the NWHI, and share these findings with the public in a responsible manner.

Currently, NOAA’s Maritime Heritage Program is the only agency engaged in maritime heritage survey in the PMNM.

Over 60 shipwrecks have been reported lost in the PMNM, some dating back to 1805. Many of these wrecks may be important cultural or historical resources, capturing information about the maritime history of the region. Sites may furnish information about western seafaring, as well as Native Hawaiian seafaring, for many historic ships (such as whalers) recruited Native Hawaiians as skilled crew members. Due to the time required for careful site survey and the logistical constraints of research cruises, often only portions of the required mapping/survey work at each site can be completed during each season. Completed site assessments are the most effective heritage resource survey tool because they allow managers to fully understand the sites they are mandated to protect.

Survey work in 2014 will continue upon efforts initiated in 2002 with the first maritime heritage resource survey in the Northwestern Hawaiian Islands. Subsequent work continued in 2003, and then annually since 2005. The planned survey work to be conducted in 2014 will continue these efforts, focusing on non-invasive non-excavation data recording at selected heritage sites at Midway, Pearl and Hermes Atoll, Lisianski, and French Frigate Shoals. In addition, efforts in 2014 will focus on exploration and survey for Battle of Midway related resources in order to work towards completing the inventory of resources at Midway Atoll.

The Midway survey project will explore sunken aircraft associated with the Battle of Midway adding an important maritime heritage component to our understanding of the broader history of World War II in the Pacific. The material culture associated with this Battle is critical to understanding connections and making comparisons between Pacific regions, and better comprehending the Pacific Front of WWII. Sunken aircraft represent the tangible evidence of our nation’s naval maritime and aviation legacy and hold potential for engaging the public as well as the application of cutting edge technology and multidisciplinary survey. This project proposes to investigate legacy magnetometer anomalies, collect and ground-truth additional magnetometry data, and make discoveries that enrich the maritime and aviation history of Midway Atoll. Additionally, it serves as an opportunity for progressive multidisciplinary invasive species survey in collaboration with PMNM’s resource protection program and advanced 3D imagery documentation and analysis. The success of this project’s exploration is increased through a

newly applied refined methodology of combined oral history research and remote sensing. Further, the multidisciplinary nature of the project is exemplary in the comprehensive nature of the research, from exploration to interpretation and dissemination, and inclusive of remote sensing, archaeological, and biological survey through advanced technologies.

Without an understanding of the resource base, without an accurate inventory of significant heritage material, maritime heritage resource management is impossible. Historic shipwrecks are subject to natural deterioration as well as intentional or inadvertent damage (dredging, looting, re-use). The first step in management is to create a resource inventory by confirming identification of sites. The next step is to conduct site assessment, characterizing the nature of the resource. Inventory and assessment are heritage preservation actions common to a number of federal and state programs. The 2014 research therefore supports cultural and historical management efforts on behalf of the different agencies of the Monument Management Board. This survey specifically addresses mandates for maritime heritage resource inventory as stated in the the PMNM Management Plan and PMNM Maritime Heritage Research, Education and Management Plan. 2014 work will also include significant education and outreach initiatives and a focus on exploration at Midway Atoll.