

Papahānaumokuākea Marine National Monument
EDUCATION 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

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: Kalewa Correa

Affiliation: NOAA PMNM Staff

Permit Category: Education

Proposed Activity Dates: 06/07/2012-06/18/2012

Proposed Method of Entry (Vessel/Plane): Plane

Proposed Locations: Midway

Estimated number of individuals (including Applicant) to be covered under this permit: 3

Estimated number of days in the Monument: 7

Description of proposed activities: (complete these sentences):

a.) The proposed activity would...

Working with Google's Streetview team we would collect 3D imagery of Midway that would be used for an immersion exhibit at Mokupapapa Discovery Center in Hilo, HI and on Google Earth, for the general public. Footage/data obtained would be in the ownership of Google, Inc., however PMNM Co-Trustees would retain non-exclusive use of all data/footage for use in educational and outreach products, or other derivative works.

b.) To accomplish this activity we would

Use a 360 degree backpack camera and Google supplied pedal trike to capture images of Midway, in approved areas open to the public or under the direct supervision of Monument/Midway NWR staff. The pedal trike is powered by human propulsion below 4 mph and would be used in the same areas accessible by golf carts.

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

Capitalizing on the nearly 320 million hits that maps.google.com receives each day on the Google, Inc. site, this project would assist the Monument in "bringing the place to the people" and showcasing Papahānaumokuākea Marine National Monument, specifically Midway Atoll

National Wildlife Refuge / Battle of Midway National Memorial in an immersion exhibit for the Hilo, Hawai'i community and visitors alike.

Other information or background: [State your position at MDC and need to obtain up to date and engaging exhibits for the purpose of promoting PMNM to the residents of Hawai'i.

Section A - Applicant Information

1. Applicant

Name (last, first, middle initial): Correa, Skye A.K

Title: Mokupapapa Discovery Center Manager

1a. Intended field Principal Investigator (See instructions for more information):

Kalewa Correa (same as applicant)

2. Mailing address (street/P.O. box, city, state, country, zip):

[REDACTED]

[REDACTED]

Phone: [REDACTED]

Fax: [REDACTED]

Email: [REDACTED]

For students, major professor's name, telephone and email address:

3. Affiliation (institution/agency/organization directly related to the proposed project):

PMNM NOAA/NOS/Office of National Marine Sanctuaries

4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Teacher; Jane Doe, Videographer):

Alex Starns, Technical Program Manager, Google Streetview Team
 Evan Rappaport, Product Manager, Google Streetview Team

Section B: Project Information

5a. Project location(s):

<input type="checkbox"/> Nihoa Island	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Necker Island (Mokumanamana)	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> French Frigate Shoals	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Gardner Pinnacles	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Maro Reef			
<input type="checkbox"/> Laysan Island	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Lisianski Island, Neva Shoal	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Pearl and Hermes Atoll	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Midway Atoll	<input checked="" type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Kure Atoll	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Other			

Ocean Based

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

Location Description:
 Midway Atoll

Ocean based shallow water only by the pier to test a 360 degree underwater camera for possible future Monument use. The camera is much like the one that Google and Catlin Seaview Survey are using to map the Great Barrier Reef.

5b. Check all applicable regulated activities proposed to be conducted in the Monument:

- Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- Anchoring a vessel
- Deserting a vessel aground, at anchor, or adrift
- Discharging or depositing any material or matter into the Monument
- Touching coral, living or dead
- Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument
- Attracting any living Monument resource
- Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)
- Subsistence fishing (State waters only)
- Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

6 Purpose/Need/Scope *State purpose of proposed activities:*

PMNM has virtually no web presence outside agency support. The ability to view Streetview images of Midway Atoll NWR can virtually transport millions of visitors to the atoll without having an impact on the environment. Additionally, the 60,000 plus visitors to Mokupapapa Discovery Center will be able to experience an immersive 360 exhibit.

7. Answer the Findings below by providing 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 Monument:

The Findings are as follows:

a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?

The applicant and two Google, Inc employees would work collectively and seek the guidance of Monument/Midway NWR staff at all times. The group would not film in any areas unless given permission from Monument staff. The applicant as an employee of PMNM NOAA is well versed and knowledgeable on the stringent Monument regulations necessary for the continued protection of all PMNM resources. As such the group would comply and adhere to all Monument Best Management Practices, including but

not limited to non-native species inspection requirements and protocols to avoid impacting seabirds and their habitat. Where appropriate the filming/data would be obtained by walking with a backpack camera or pedal trike, making sure to avoid any negative impacts to PMNM resources by consulting with Monument/Midway NWR staff. The applicant would also consult with additional PMNM NOAA and Office of Hawaiian Affairs staff to ensure that the filming objective is carried out with adequate safeguards for cultural/natural resources and reverence for the Native Hawaiian culture.

b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects?

As stated in Presidential Proclamation 8031, access to the Monument is restricted and many activities are either prohibited in PMNM or highly regulated in order to ensure the ecological integrity of PMNM and manage human uses. By using technology never before utilized in PMNM, the activity would (1) further the educational value of the Monument and (2) indirectly assist in the conservation protection of the Monument by promoting PMNM to residents of Hawai'i and visitors to Mokupapapa Discovery Center in Hilo, HI. In addition, by partnering with Google, Inc. PMNM and specifically Midway Atoll National Wildlife Refuge would be showcased on Google Earth and millions of visitors would be virtually engaged in PMNM daily. All of this would be accomplished with a limited group of three individuals and as such there are no anticipated indirect, secondary, or cumulative effects of the activity, other than enhancing PMNM resources.

c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.

There is no other practicable alternative to conducting the activity within the Monument. The objective of this activity is to obtain 3-dimensional footage/data that would be used to showcase PMNM on Google Earth, Inc. to millions of users worldwide and to build an up-to-date immersive exhibit in Hilo's Mokupāpapa Discovery Center. Midway is regarded as the 'window' to the Monument and is most accessible via

chartered aircraft, thus using this technology on Midway would require visitation to Midway.

d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?

Once completed it will provide access to the Monument virtually. This in turn will expose millions of people to the Monument without ever having to set a foot within the Papahānaumokuākea Monument boundary. By limiting the activity to three individuals under close consultation with Monument/Midway Atoll staff there are no anticipated adverse impacts to Monument cultural, natural, and historic resources.

e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.

The duration of the activity should take approximately one week utilizing three people and working within the flight schedules of USFWS chartered aircraft.

f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

I am currently the Mokupāpapa Discovery Center (MDC) Manager, in charge of overall exhibits, staff, and programs within the center. I have a B.A. in Hawaiian Studies and hold a Masters in Information Science. My culture together with my education inform me on best practices with regard to my conduct. I represent not only NOAA when on Midway but also my 'ohana. I have a strong background in ethnography, GIS and computer science which I will call upon to complete the project, together with my close partnership with Google, Inc.

g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

I will be utilizing funding from the MDC educational outreach budget to assist with my trip up. The employees from Google are allotted a large sum of capital in order to complete the mapping project. All insurance liability will be handled through Google's \$2,000,000 general liability insurance policy: see attached documentation.

h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.

The trike will be used on the roads on Midway to capture 3D imagery. The Google trike is an ideal data capture vehicle as it is designed and calibrated to capture data at a specific data rate of 60 frames per second. It was designed by Google to specifically work with the Streetview server architecture which cannot be reproduced via retrofit. The 360 degree backpack will capture non-sensitive geography that the trike cannot access. As stated previously, all filming would occur under close collaboration with Monument/Midway Atoll NWR staff. See attached Spatial Imagery Data Plan for proposed data gathering locations.

i. Has your vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?

N/A. Access would be via plane.

j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.

I have not applied for a PMNM permit previously; I also have no existing or prior violations within sensitive areas; and as such there are no other factors that would make the issuance of a permit for the activity inappropriate.

8. Procedures/Methods:

The Google provided trike would be used on the roads on Midway to capture 3D imagery. The 360 degree backpack will capture non-sensitive geography that the trike cannot access. As stated previously, all filming would occur under close collaboration with Monument/Midway Atoll NWR staff. The applicant, as a PMNM NOAA employee would ensure that all filming is carried out with the utmost care regarding Monument resources and maintaining strong partnerships with co-managing agencies.

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, contact the Monument office on the first page of this application.

9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):

none

Common name: N/A – No resources would be removed.

Scientific name:

& size of specimens:

Collection location:

Whole Organism Partial Organism

9b. What will be done with the specimens after the project has ended?

9c. Will the organisms be kept alive after collection? Yes No

• Specific site/location:

• Is it an open or closed system? Open Closed

• Is there an outfall? Yes No

• Will these organisms be housed with other organisms? If so, what are the other organisms?

• Will organisms be released?

10. If applicable, how will the collected samples be transported out of the Monument?

N/A – No resources would be removed.

11. Is your proposed activity based on a State Department of Education Standards Based Curriculum? If so, describe:

The outcome of the Google Streetview mapping project on Midway would result in an interactive exhibit that hit State Department of Education geography standard ss.3.7.1.

12. If applicable, describe how you are collaborating with others in any way to reduce duplicative activities in the Monument or elsewhere?

To my knowledge, this is the first time this type of technology would be used in the Monument and as stated previously, although Google, Inc. would maintain full ownership of the data/footage, PMNM Co-Trustees would retain lifetime non-exclusive use.

13. What materials, products or deliverables will be developed as a result of your proposed activity? Provide a time line for write-up and publication of information or production of educational materials:

The deliverables of the project will be very large amounts of .raw video imagery. Imagery will be owned by Google but the Monument and it's partners have exclusive usage rights to the data. Images will be available for use within two months of the completed project.

14. List all specialized gear and materials to be used in this activity:

360 degree imagery backpack

Google pedal trike with 360 degree data camera. Dimensions of the Google trike are 8' 6" L x 4' 8" W x 5' 9" H. Applicant will attempt to coordinate transportation of the Google trike via an already scheduled vessel.

15. List all Hazardous Materials you propose to take to and use within the Monument:

None

16. Describe any fixed installations and instrumentation proposed to be set in the Monument:

None

17. List all Applicants' publications/references directly related to the proposed project:

Images will be available on Google Streetview upon completion of the project

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as “confidential” prior to posting the application.

Signature

Date

**SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE
BELOW:**

Papahānaumokuākea Marine National Monument Permit Coordinator
6600 Kalaniana'ole Hwy. # 300
Honolulu, HI 96825
FAX: (808) 397-2662

DID YOU INCLUDE THESE?

- Applicant CV/Resume/Biography
- Intended field Principal Investigator CV/Resume/Biography
- Electronic and Hard Copy of Application with Signature
- Statement of information you wish to be kept confidential
- Material Safety Data Sheets for Hazardous Materials