

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic Resources  
Honolulu, Hawaii 96813

May 24, 2019

Board of Land  
and Natural Resources  
Honolulu, Hawaii

Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National Monument Native Hawaiian Practices Permit to Ms. Keomailani Case, Nā Kālai Wa‘a for Access to State Waters to Conduct Training Sails on the Makali‘i and Cultural Research Activities

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument Native Hawaiian practices permit to Keomailani Case, pursuant to § 187A-6, Hawaii Revised Statutes (HRS), chapter 13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

The Native Hawaiian Practices permit, as described below, would allow entry and activities to occur in the Papahānaumokuākea Marine National Monument (Monument), including the NWHI State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Necker Island (Mokumanamana)

The activities covered under this permit would occur from June 1, 2019 – May 31, 2020.

The proposed activities are a continuation of work previously permitted and conducted in the Monument.

INTENDED ACTIVITIES

Ms. Keomailani Case proposes to conduct training sails to Mokumanamana from a traditional double-hulled voyaging canoe using non-instrumented navigation. A second motor vessel would escort the voyaging canoe for safety. While at Mokumanamana, personnel will conduct research on the relationship of terrestrial markers with celestial movements during the summer solstice. This work will be in conjunction with separately permitted individuals under the direction of Ms. Pualani Kanahale (PMNM-2019-007). Researchers will also use handheld camera equipment as well as a DJI Phantom III to record celestial movements and document archaeological sites. The total group of 34 individuals including two PWO Master Navigators and numerous trainees, and researchers would access the Monument aboard traditional voyaging canoe Makali‘i and her escort vessel Alaka‘i owned and operated by Nā Kālai Wa‘a. Proposed activity dates are from June 14 – June 29, 2019.

While in the Monument activities would consist of conducting cultural research and protocols (offering ho‘okupu (gifts of liquid ‘awa), oli (chants) and pule (prayers) in the

near shore waters of both Nihoa and Mokumanamana; swimming and snorkeling activities to compare the MHI and NWHI marine reef systems; sustenance (federal waters) and subsistence (state waters) fishing, and anchoring overnight on sandy substrate only at Nihoa and Mokumanamana.

In order to reduce human impacts to Mokumanamana, the applicant would abide by Monument Special Conditions and Rules for Moving Between Islands/Atolls and Packing for Field Camps (BMP #007). No cooking or fires will be utilized on island. Permitted personnel would be escorted at all times by an approved Monument appointed resource monitor, experienced and trained to safely access Mokumanamana with no adverse impact to native species or cultural sites. Each team of three individuals will be escorted to their study location and set up camp after determining that no protected species will be adversely affected. Each team will have a radio to maintain communications with remaining participants and the M/V Searcher. No more than 17 personnel from both the Kanahale and Case permits (15 researchers and 2 resource monitors) would be present on land at any time. All solid wastes will be removed from the island. Landing on the island would only occur when no Hawaiian monk seals and sea turtles are present at the landing sites. Furthermore, all personnel would avoid all areas where Hawaiian monk seals and sea turtles haul out. Fishing activities would include hand-lines while under sail using traditional and contemporary style of lures, handline while anchored on sandy substrates, free diving with three pronged spears and hand net, and pole fishing with lines up to 100 feet. The line would be monitored at all times and personnel would abide by – Seabird Protocols Necessary for Conducting Trolling Research and Monitoring (PMNM Best Management Practice #008) to reduce impacts to seabirds. Spear fishing would abide by a blue ocean rule meaning that a diver could only shoot where there was a blue ocean background to avoid inadvertently striking non-prey species of fish and coral. All fishing gear would be removed from the water if any Hawaiian monk seals or sea turtles are observed. All fish caught would be consumed within the Monument. Ms. Case's activities are further detailed in her permit application.

All activities will be non-intrusive and performed in a culturally appropriate manner while adhering to Monument Best Management Practices (BMP). To safeguard Monument resources the applicant would abide by the following BMPs while conducting the aforementioned activities within the PMNM: Best Management Practices for Boat Operations and Diving Activities (BMP #004); Disease and Introduced Species Prevention (BMP#011); Minimizing Impacts to Land Birds (BMP # 012).

The activity would help the Monument to better understandings of the historical cultural usage of Mokumanamana while also supporting Native Hawaiian cultural access to reconnect with natural and spiritual resources. The activities directly support the Monument Management Plan (MMP), and is described in the Native Hawaiian Culture and History (NHCH) Action Plan under activities, NHCH-2.2: *Support Native Hawaiian cultural research needs*, NHCH-2.3: *Facilitate cultural field research and cultural education opportunities annually*, and NHCH-2.6: *Continue to facilitate Native Hawaiian cultural access* (PMNM MMP Vol. 1, p. 135-136).

The activities described above may require the following regulated activities to occur in State waters:

- Anchoring a vessel
- Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument
- Subsistence Fishing

### REVIEW PROCESS

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since March 27th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

### **Comments received from the scientific community are summarized as follows:**

Scientific reviews support the acceptance of this application. The following concerns were raised:

1. How many/what type of structures are intended to be constructed while on Mokumanamana?

*We will not be constructing any type of structures while on Mokumanamana nor will we be driving stakes into the ground. Cultural researchers will use bivy sacks for camping at each of the five observation points.*

2. How will human waste be handled on land?

*We will be using Wag Bags while on island to safely transport our human waste off island with us.*

3. Can you confirm whether you are proposing to fish from land with handline and pole?

*No we will not be fishing from land*

### **COMMENTS:**

1. NMFS appreciates the special cultural significance Nihoa and Mokumanamana have to the Hawaiian people. Our agency must make it clear that Nihoa and Mokumanamana are also important areas to protected species, most importantly the critically endangered Hawaiian monk seal and the green sea

turtle. For this reason, our agency provides the following comments which we hope will allow the permit applicants to take full advantage of the opportunity to explore their cultural heritage, but at the same time avoid or minimize interactions between the applicants and monk seals and turtles.

*Mahalo.*

2. Permit applicants should be advised to avoid areas on Nihoa and Mokumanamana that have been historically monk seal haul-out areas as much as possible. These areas are sector 1 and 2 on Nihoa (if applicants land due to bad weather) and sectors 2, 4, and 5 at Mokumanamana

*There is no plan to make landfall on Nihoa. We will defer to EKF and their plan for on island access for Mokumanamana.*

3. Permittees should be required to submit a report on any Hawaiian monk seal takes. Takes include anything that has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, feeding, or sheltering. A report on takes should be submitted to the PMNM Permit POC who can forward it to NMFS/PIRO (see the provided example).

*Understood*

4. NMFS wants stress that the viewing guidelines for seals are to stay at least 150 feet away from any animals to decrease the chance of disturbance. However, this is may not be possible in many areas. To otherwise reduce the risk of disturbance:

- a. Permittees should maintain a low profile and remain out of the seal's line of sight by remaining behind it. Use rocks as visual barriers and do not walk between the seal and the water unless the seal is extremely high up the beach/shelf and there is no other route. If the seal reacts, increase distance from the seal and get out of the seal's line of sight.
- b. Permittees should not snorkel or swim if a mother-pup pair is in the area. Mothers have attacked swimmers and several of these attacks have resulted in severe injuries. Mothers may depart a beach to attack a perceived threat in the water and can swim at a fast rate.

*Understood*

5. If gear is placed on the shoreline and a seal hauls out next to it – the gear should stay in place until the seal departs the area. No attempt should be made to retrieve gear while a seal is hauled out next to it.

*Understood*

6. For turtles, the guiding principles for turtles is to stay 3 meters (10ft) away; if turtles are responding to human presence then increase distance from turtles. If it's night time and

turtles are present (basking or nesting) do not use white lights, maintain a low profile close to the beach/shore line (water / sand interface), and keep a 50ft distance from nesting turtles.

*Understood*

7. NMFS recommends at least two resource monitors for these three permit (2019-007, 009, 010). NMFS also requests that the resource monitors assigned to these permits meet with the NOAA Fisheries Pacific Islands Fisheries Science Center staff for a short training and discussion regarding best practices around seals and turtles. NMFS PIRO staff can facilitate this meeting.

*Understood*

8. While the applicant has asked for permission to fish while in the Monument, NMFS recommends that the permit conditions should include a restriction on shore-based fishing and fishing at anchor, due to the risk of hooking and entanglement of protected species. Trolling while in the Monument does not pose an unacceptable risk, and should be allowed.

*We request the ability to fish while at anchor with the understanding that fishing activities will be conducted by designated and trained Lawai'a practitioners who adhere to the best practices and standards to protect the species, the natural environment, and our cultural practices.*

*Fishing will only be done for subsistence purposes, not for game fishing, trophy fishing, etc., and the need for fishing activities will be determined by the Master Navigator, and the lead Lawai'a per the necessity to feed the crew. Per our traditional practices, fishing while at anchor will only occur in ways and in areas where a specific species of fish may be obtained, in an appropriate number to feed the crew, in a culturally and environmentally appropriate manner.*

*Our Lawai'a are experienced fishermen trained in spear and pole fishing, who are well trained in the pono practices of acquiring fish which include observing the lines, fishing where the desired fish is aggregating, and following the State of Hawai'i Administrative Rules and Regulations that are best suited for the Monument and our cultural practices. Lawai'a will also take extra precaution to avoid endangered species, such as seals and turtles. Fishing practices will not occur if these species are threatened by fishing activities. Fishing will only occur in daylight hours so that lines can be monitored.*

9. Monk seals aren't often seen until AFTER they have taken a hook. Lines and the surrounding waters must be actively monitored (i.e. someone sitting watching them at all times).

*Understood*

10. If a monk seal is observed in water within 150 feet then lines should be removed immediately. If the animal isn't seen after 10 minutes then fishing can start again.

*Understood*

11. If a seal or turtle is hooked, it must be reported immediately and additional fishing paused.

*Understood*

12. The bay at Mokumanamana is heavily trafficked by monk seals. Fishing should not occur in the bay to prevent accidental hooking and other interactions.

*Understood*

13. Activities should not occur within 150 ft of animals on land or in water.

*Understood*

14. USFWS appreciates the cultural significance of Mokumanamana and recognizes the importance of this journey to enhance the knowledge of Mokumanamana as well as its link to the rest of the archipelago.

*Mahalo.*

15. There is a high degree of concern with the number of people (15) proposed to stay on the island. An unusually high degree of care must be taken to minimize the impact to this fragile environment.

*We will work vigilantly to ensure the minimization of impact to the fragile environment of Mokumanamana. To ensure this, we are attending a series of trainings that began on March 30 with certified resource monitors Kalani Quiocho from NOAA and Brad Kaaleleo Wong from OHA. In addition, research teams are only traveling across the island to their research sites by daylight. These researchers will stay in place at their research site during night hours while they conduct their observations. Researchers will continue to work closely with the Resource Monitors before and while on island to ensure adherence to PMNM Best Management Practices.*

16. USFWS recommends at least two resource monitors be assigned between the three permits (2019-007, 009, 010) with at least one remaining on land. At least one will represent a co-managing agency. Resource Monitors should have experience in terrestrial ecosystems, experience in seabird colonies, experience digging out burrows, ability to identify native and non-native plants of the NWHI, and experience implementing quarantine procedures.

*The activities on island are being coordinated by EKF (see their permit) and we will make sure our participants follow the codes of conduct recommended on the island and within this cultural group. It is our current understanding that 2 monitors will be going to Mokumanamana with the research group.*

17. Ecologically speaking, Mokumanamana is arguably the most pristine island in Papahānaumokuākea. Please follow quarantine protocols explicitly to prevent unintended damage to the sensitive marine and terrestrial environments.

*Understood. We are working with NOAA to adhere to these policies.*

18. We request the crew planning to stay on Mokumanamana work directly with a Resource Monitor from a managing agency while preparing gear for this trip to ensure proper biosecurity measures are in place. We fully trust the intent of the crew, though PMNM biosecurity protocols can be very detailed on a trip of this magnitude. Coupled with the sensitivity of this environment, we feel close collaboration with a Resource Monitor in the planning/preparation stages of this expedition is warranted.

*The activities on island are being coordinated by EKF (see their permit) and we will make sure our participants follow the codes of conduct recommended on the island and within this cultural group. We are working with Brad Kaaleleo Wong of OHA and Kalani Quiochoco of NOAA to ensure proper training, which has begun formally on March 30, 2019.*

19. Due to the rarity of expeditions made to Mokumanamana, it would be very valuable if the resource monitor and/or other crew could record seabird species, seabird breeding phenology, plant species observed, and any invasive plants (especially *Cenchrus echinatus*, common sandbur, which is spreading on Nihoa). Thanks!

*Because EKF is leading the on island research we will discuss with them and take their lead on how to handle this additional research while on island.*

20. It may be challenging to find an area clear of nesting or burrowing birds for the central camp, but efforts should be made to reduce impacts and document birds disturbed. June is a peak time for breeding seabirds, and efforts should be made to avoid walking through or camping in sooty tern or gray-backed tern colonies. In the hot sun, eggs can be baked quickly, and small chicks can be separated from parents and die from exposure.

*Understood*

21. Anchoring off Mokumanamana should avoid areas of hard benthic substrate, as those areas are often colonized by live marine organisms. All anchors should be placed in sand.

*Understood*

22. Fishing with a spear or net can damage the reef and benthic environment should not be allowed in the monument. Fish can be injured and get off of the spear and get away only to die elsewhere, while nets are indiscriminant and have high amounts of bycatch with near total mortality. Laynets are very harmful and throw nets can also damage the benthic substrate. Fishing from the boat while at

anchor with pole and line or handlines is also not a good idea, as they will catch reef fish and potentially sharks. Trolling with handlines while underway will do the least amount of harm, and has been permitted in the past.

*Fishing has been our traditional subsistence method for our ancestors while visiting these kupuna islands. It was our practice to know the ko'a i'a (fish aggregation zones) and the best methods for catching the specific desired fish. For our trip to the Monument, we are taking our experienced Lawai'a, whose role it is to fish for our crew's subsistence while with our Kupuna*

*islands. These Lawai'a are experienced fishermen trained in spear and pole fishing. Nets are used seldom, and only for the intent of safest practice for fish, environment and kanaka. There is currently no intent to throw or lay net, as the amount of fish caught using this method is more than what is needed to sustain our crew. Smaller nets may be utilized to ensure safely securing the fish being caught. Pole/handline/spear fishing will be conducted by Lawai'a who are well trained in the pono practices of acquiring fish which include observing the lines, fishing where the desired fish is aggregating, and following the State of Hawai'i Administrative Rules and Regulations that are best suited for the Monument and our cultural practices. Lawai'a will also take extra precaution to avoid endangered species, such as seals and turtles. Fishing practices will not occur if these species are threatened by fishing activities. Fishing will only occur in daylight hours so that lines can be monitored.*

23. It is recommended to have a dehooker on board (and someone who knows how to use it) so they can release any sharks or other un-wanted fish caught while sustenance fishing.

*We will have a dehooker on board and the Lawai'a on board are also trained in using this tool.*

24. Response to 7 (o.) on page 15 "Will all Monument Resources harvested in the Monument be consumed in the monument? If not, explain why not", the applicant responds "No". Is this a mistake? Please explain.

*Fish caught in the Monument will be eaten in the Monument*

25. Please detail what activities are planned on/near to Nihoa? It should be noted that any emergency procedures are typically handled with the Coast Guard and are not added into a permit.

*Traditional Navigation uses Nihoa as a waypoint for Mokumanamana and other kupuna islands. This will be the function of Nihoa for our voyage. As a way point, it is sometimes necessary to stall at Nihoa and wait for the appropriate window of weather and time to allow us to arrive at Mokumanamana in the morning after sunrise. If all the elements align, we will not need to be stopping at Nihoa, but will be sailing past within sight of Nihoa. If we need to stall, then we would be anchoring off of Mokumanamana for a couple hours to half a day in order to stall for weather/time window. There is no plan to make land fall on Nihoa.*

**Comments received from the Native Hawaiian community are summarized as follows:**



Cultural reviews support the acceptance of this application. No concerns were raised.

**Comments received from the public are summarized as follows:**

No comments were received from the public on this application.

**Additional reviews and permit history:**

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g. MMPA, ESA, EA) Yes  No   
If so, please list or explain:

- The proposed activities are in compliance with the National Environmental Policy Act.
- National and State Historic Preservation Act Section 106 consultation (pending)

The Department has made an exemption determination for this permit in accordance chapter 343, HRS, and Chapter 11-200, HAR. See Attachment (“DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPAĀNAUMOKUĀKEA MARINE NATIONAL NATIVE HAWAIIAN PRACTICES PERMIT TO MS. KEOMAILANI CASE, NĀ KĀLAI WA‘A FOR ACCESS TO STATE WATERS TO CONDUCT TRAINING SAILS ON THE MAKALI‘I AND CULTURAL RESEARCH ACTIVITIES UNDER PERMIT PMNM-2019-009”).

Has Applicant been granted a permit from the State in the past? Yes  No   
If so, please summarize past permits:

Have there been any a) violations: Yes  No   
b) Late/incomplete post-activity reports: Yes  No

Are there any other relevant concerns from previous permits? Yes  No

**STAFF OPINION**

DAR staff is of the opinion that Applicant has properly demonstrated valid justifications for her application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with certain special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Native Hawaiian Practices Permit General Conditions. All suggested special conditions have been vetted through the legal counsel of the Co-Trustee agencies (see Recommendation section).

**MONUMENT MANAGEMENT BOARD OPINION**

The MMB is of the opinion that the Applicant has met the findings of Presidential Proclamation 8031 and this activity may be conducted subject to completion of all compliance requirements. The MMB concurs with the special conditions recommended by DAR staff.

**RECOMMENDATION:**

Based on the attached proposed declaration of exemption prepared by the department after consultation with and advice of those having jurisdiction and expertise for the proposed permit actions:

1. That the Board declare that the actions which are anticipated to be undertaken under this permit will have little or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment.
2. Upon the finding and adoption of the department's analysis by the Board, that the Board delegate and authorize the Chairperson to sign the declaration of exemption for purposes of recordkeeping requirements of chapter 343, HRS, and chapter 11-200, HAR.
3. That the Board authorize and approve a Native Hawaiian Practices Permit to Ms. , for Papahānaumokuākea Marine National Monument, with the following special conditions:
  - a. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocols attached to this permit.
  - b. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
  - c. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge

Respectfully submitted,



MARIA CARNEVALE

Papahānaumokuākea Marine National Monument

APPROVED FOR SUBMITTAL



SUZANNE CASE

Chairperson

Papahānaumokuākea Marine National Monument  
NATIVE HAWAIIAN PRACTICES 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:  
NOAA/Inouye Regional Center  
NOS/ONMS/PMNM/Attn: Permit Coordinator  
1845 Wasp Blvd, Building 176  
Honolulu, HI 96818  
nwhipermit@noaa.gov  
PHONE: (808) 725-5800 FAX: (808) 455-3093

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:** Keomailani Case

**Affiliation:** Nā Kālai Wa‘a

**Permit Category:** Native Hawaiian Practices

**Proposed Activity Dates:** June 14 - 29, 2019, Mōhalu to ‘Olekūkahi in Ka‘aona

**Proposed Method of Entry (Vessel/Plane):** 2 Vessel

**Proposed Locations:** Mokumanamana

**Estimated number of individuals (including Applicant) to be covered under this permit:** 26

**Estimated number of days in the Monument:** 15

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

**a.) The proposed activity would...**

Our research would bring light to the main functions of Mokumanamana for Hawaiians historically, presently and potentially through the methodologies and frameworks established by Hawaiians and re-established by the Edith Kanaka‘ole Foundation and Nā Kālai Wa‘a's work. NKW has partnered with EKF, sailing Makali‘i to Mokumanamana bringing two Pwo navigators and their apprentices as a rite of passage for the younger crew.

This will be the first trip to Mokumanamana by Makali‘i and her crew. The Master Navigators of Nā Kālai Wa‘a and their students have over 100 years of accumulated studying of celestial bodies’ movements over the Pacific Ocean. Makali‘i will be voyaging to Nihoa and Mokumanamana as a capstone voyage for NKW’s Project Hanauna Ola: sustaining the generations through voyaging. This project is funded by an Administration of Native Americans SEDS grant. NKW is partnering with EKF (under a separate permit) for this voyage to be able to assist with the study of celestial bodies over Mokumanamana, further enhancing the voyage experience for our training captains and navigators of NKW/ ‘Ohana Makali‘i. The end goal of this voyage partnership is to ensure the legacies of our cultural practices for generations while securing Mokumanamana in our current practitioners universe.

According to the traditions of kupuna of Nā Kālai Wa‘a, navigators were trained at Ko‘a Holomoana, a heiau site with manamana that faces Mokumanamana in Mahukona. These

navigators were tested by being taken to Mokumanamana and needing to return successfully home to Mahukona and heiau Ko'a Holomoana.

This voyage to Mokumanamana allows Makali'i to be the cultural vessel to carry the research team to Mokumanamana, while allowing the next generation of captains and navigators the opportunity to continue traditions of voyaging, connecting Ko'a Holomoana with Mokumanamana.

The EKF has been the only native Hawaiian research entity that has continuously studied the manamana sites on Mokumanamana for over 10 years, then subsequently expanded the learning acquired from the Mokumanamana methodologies to the restoration and studies of other sites in the main Hawaiian Islands. The fieldwork on Mokumanamana has allowed the researchers the ability to gain great insight into the profoundly deep knowledge and accuracy of the ali'i and kāhuna's concept of time, space, geological creation of islands, and Universal relativity. On the previous trips the researchers were able to establish baseline data utilizing the sun's movement between the Ala Polohiwa a Kāne, Piko o Wākea and Ala Polohiwa a Kanaloa. A three-year study of manamana located on Maunaloa has granted the research team the unique opportunity to study the function of manamana for a longer period of time. With the newly acquired skills the EKF would like to further that knowledge into star, planet and Milky Way alignments during the Summer solstice in June 2019. The star expertise that Nā Kālai Wa'a will be bringing will greatly assist the EKF with the star to site alignments. Both the EKF and NKW will be bringing the next generations of Hawaiian practitioners/scholars to assure that the continuance of the great work of rediscovery continues.

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

begin our voyage to Mokumanamana in early June, 2019. Makali'i and Alaka'i will depart from Mahukona making their way using traditional navigation skills and technology to Mokumanamana by Summer Solstice. Their successful arrival to Mokumanamana using the elements and then their successful return will complete one training cycle for the next generation of leaders for Nā Kālai Wa'a, validated in the processes of our ancestors. Navigators need to pull Mokumanamana out of the sea the same way they pull the stars and the sun out every day. This voyage will be the first time that apprentice voyagers will complete the trip from Ko'a Holomoana at Mahukona, Kohala to Mokumanamana in over 200 years.

Upon arrival to Mokumanamana, the team would assign five groups of three individuals on five separate locations for the purpose of observing the celestial activities in connection to the sites. The research will begin an hour prior to the sunset and will end about two hours after sunrise. Each group will consist of at least a scholar, a practitioner and a star person. Near sunset, the teams will be situated on designated areas and stay in the same location for the entire night recording observations of celestial to terrestrial alignments, compass and GPS fixes, as well as site to site alignments back towards Hawai'i (southeast), down south, northwest or beyond. The methods and technologies of observation and recording used over the years of the Mokumanamana studies combined with the newly acquired techniques from our Maunaloa studies will be applied to this research. The team is confident that new data will be acquired that will support our theories about the function of Mokumanamana's sites. The methodologies and

framework used will support that Hawaiians kept track of the time by the celestial movements for geological activities, ceremonial/religious processes, political decisions, and practical benefits. It will also demonstrate that the Hawaiians already had an understanding of the movement of the sun from that point of the world and universe. That's what Mokumanamana is about. Trails of the sun, trails of the stars, these are primary sources of knowledge. The teams will go through 5 vigorous trainings prior to the arrival to be prepared with all of the information gathered from the last 10 years.

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

1. Further strengthen the voyaging traditions related to Mokumanamana by modern practitioners,
2. Fill in the missing historical gaps of the function of Mokumanamana,
3. Directly correlate historical native Hawaiian visits to the island,
4. Relate migration chants and Pule 'Aha Lanalana to Mokumanamana,
5. Link Haho, Līloa, 'Umi and other ali'i to Mokumanamana,
6. Re-establish a relationship between modern kāhuna with ancient kāhuna,
7. Pass on the last 10 years of field data to the next generation of researchers, &
8. Complete the process of research and navigation, use of celestial bodies for alignment utilizing a traditional voyaging canoe for this purpose.
9. Share our voyage to Mokumanamana with the general public for educational purposes that support the points above.

**Other information or background:**

There will be a total of 31 people. This number also includes the necessary crew of 6 for the Searcher and an individual who will be representing the resource monitor if needed.

The large numbers of individuals are to allow for a few crew changes during the Makali'i sail legs. Members in the EKF research group will be traveling with the Makali'i, while some Nā Kālai Wa'a crewmembers will be traveling on the Searcher (permitted under EFK's permit). Another escort vessel, Alaka'i, will be following Makali'i for safety purposes. NKW intends on sailing from Hawai'i Island to Mokumanamana and back to Hawai'i Island. The EKF intends on joining NKW on route from O'ahu, with researchers traveling on the Searcher as well as Makali'i canoe, and WILL travel together from there to Mokumanamana. At the arrival of Mokumanamana a crew of 15 individuals will be embarking upon the island while the rest of the crews will be anchored safely offshore. The land crew will stay on the island for 3 nights and will disembark early in the morning to begin the return back to Hawai'i. At this point the individuals on the Searcher will return directly to O'ahu while Nā Kālai Wa'a and its escort vessel will sail back to Hawai'i Island.

Weather and other extraneous circumstances may cause Makali'i and Alaka'i to depart Mokumanamana separately from the Searcher and return home on a different time schedule. The

searcher will be on a 10 day contract, but Makali'i may require a few more days to sail from Mokumanamana to Kaua'i.

Passengers on Searcher from O'ahu to Mokumanamana

1. Chadd Paishon - NKW Pwo Master Navigator
2. Keani Kaleimamahu - NKW Trainee
3. Lanihuli Kanahale - NKW Trainee
4. Pomai Bertelmann - NKW Trainee
5. Lehua Ah Sam - NKW Trainee
6. Brandi Beaudet - NKW Trainee
7. Chelsey Dickson - NKW Trainee
8. Kaniela Anakalea-Buckley - NKW Trainee

Crew on Alaka'i from Kaua'i to Mokumanamana:

1. Nakoa Prejean - NKW Trainee
2. Kainalu Bertelmann - NKW Trainee
3. Keali'i Maielua - NKW Trainee
4. 'Āina Paikai - NKW Documenter

Crew on Makali'i from Kaua'i to Mokumanamana:

1. Milton Gervin Bertelmann - Pwo Master Navigator
2. Pualani Mai'elua Lincoln - NKW Trainee and EKF Researcher
3. Kealaka'i Kanaka'ole - NKW Trainee and EKF Researcher
4. Kalā Mossman - NKW Trainee and EKF Researcher
5. Bonnie Kahape'a - NKW Trainee
6. Patti-Anne Solomon - NKW Trainee
7. Lei Ilae-Kaleimamahu - NKW Trainee
8. Leiohu Santos-Colburn - NKW Trainee
9. Mike Manu - NKW Trainee
10. Ui Malakaua - NKW Trainee
11. Keala Kahuanui - NKW Trainee
12. Ashton Dircks Ah Sam - NKW Trainee
13. Ah Lun Yung - NKW Trainee
14. Jamie Makasobe - NKW Documenter

EKF Mokumanamana Field Researchers:

1. Kalei Nu'uhiwa - Covered Under EKF Permit
2. Pualani Lincoln-Mai'elua - Covered Under Both Permits
3. Huihui Mossman-Kanahale - Covered Under EKF Permit
4. Kalā Mossman - Covered Under Both Permits
5. Kealaka'i Kanaka'ole - Covered Under Both Permits
6. Ulalia Woodside - Covered Under EKF Permit
7. Ku'ulei Kanahale - Covered Under EKF Permit

8. Hi'ilei Kawelo - Covered Under EKF Permit
9. Ulu Keali'iakanaka'ole - Covered Under EKF Permit
10. Makali'i Crew - TBD
11. Makali'i Crew - TBD
12. Makali'i Crew - TBD
13. Makai'i Crew - TBD

The researchers from Makali'i crew will be determined by May 17, 2019.

Passengers on Searcher from Mokumanamana to O'ahu:

1. Kealaka'i Kanaka'ole - NKW Trainee and EKF Researcher
2. Kalā Mossman - NKW Trainee and EKF Researcher
3. Lei Ilae-Kaleimamahu - NKW Trainee
4. Pualani Mai'elua Lincoln - NKW Trainee and EKF Researcher
5. Ui Malakaua - NKW Trainee
6. Ah Lun Yung - NKW Trainee
7. Keala Kahuanui - NKW Trainee

Crew on Alaka'i from Mokumanamana to Kaua'i:

1. Nakoia Prejean - NKW Trainee
2. Kainalu Bertelmann - NKW Trainee
3. Ashton Direks Ah Sam - NKW Trainee
4. 'Āina Paikai - NKW Documenter

Crew on Makali'i from Mokumanamana to Kaua'i:

1. Milton Gervin Bertelmann - Pwo Master Navigator
2. Keali'i Maielua - NKW Trainee
3. Pomai Bertelmann - NKW Trainee
4. Chadd Paishon - NKW Pwo Master Navigator
5. Lanihuli Kanahale - NKW Trainee
6. Bonnie Kahape'a - NKW Trainee
7. Kaniela Anakalea-Buckley - NKW Trainee
8. Keani Kaleimamahu - NKW Trainee
9. Leiohu Santos-Colburn - NKW Trainee
10. Mike Manu - NKW Trainee
11. Lehua Ah Sam - NKW Trainee
12. Chelsey Dickson - NKW Trainee
13. Brandi Beaudet - NKW Trainee
14. Jamie Makasobe - NKW Documenter

Vessel name: Makali'i

Vessel owner: Nā Kālai Wa'a

Captain's name: Shorty Bertelmann

IMO#:



Vessel ID#: HAZ6237FF495-H

Flag: US

Vessel type: traditional double hulled voyaging canoe

Call sign: WCQ4292

Embarkation port: Kawaihae

Last port vessel will have been at prior to this embarkation: Kawaihae

Length: 54ft

Gross tonnage: 8 tons

Total ballast water capacity volume (m3): n/a

Total number of ballast water tanks on ship: 0

Total fuel capacity: n/a

Total number of fuel tanks on ship: n/a

Marine Sanitation Device: n/a

Type: 5

Vessel name: Alaka'i

Vessel owner: Nā Kālai Wa'a

Captain's name: Shorty Bertelmann

IMO#:

Vessel ID#: RDU280020678

Flag: US

Vessel type: Radon

Call sign:

Embarkation port: Kawaihae

Last port vessel will have been at prior to this embarkation: Kawaihae

Length: 28'

Gross tonnage: 3 tons

Total ballast water capacity volume (m3): n/a

Total number of ballast water tanks on ship: 0

Total fuel capacity: 200 gal

Total number of fuel tanks on ship: 1

Marine Sanitation Device: none

Type: I

## Section A - Applicant Information

### 1. Applicant

**Name (last, first, middle initial):** Case, W.D. Keomailani

**Title:** Executive Director, Nā Kālai Wa‘a

**1a. Intended field Principal Investigator (See instructions for more information):**  
Milton Gervin “Shorty” Bertelmann, Master Navigator

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

[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):**  
Edith Kanaka‘ole Foundation, Nā Kālai Wa‘a, and Kawehiokalani INC.

**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, Diver):**

1. Milton Gervin “Shorty” Bertelmann - Master Navigator and Captain of Makali’i, Crew on Searcher
2. Chadd Paishon - Master Navigator and Captain of Makali’i
3. Pualani Lincoln-Mai‘elua - Apprentice Navigator for Makali’i, EKF Research Team (covered under EKF and NKW permit)
4. Kala Mossman - Crew for Makali’i, Research Team for EKF, Onboard First Responder (covered under EKF and NKW permit)
5. Keala Kanaka‘ole - Crew for Makali’i, Research Team for EKF (covered under EKF and NKW permit)

6. Kaniela Anakalea-Buckley - Crew on Makali'i, Passenger on Searcher
7. Leiohu Colburn-Santos - Crew on Makali'i, Captain in Training on Makali'i
8. Chelsey Dickson - Crew on Makali'i, Passenger on Searcher
9. Ashton Dircks Ah Sam - Crew on Makali'i, Passenger on Searcher
10. Lehua Dircks Ah Sam (aka Kristen Dircks)- Passenger on Searcher, Crew on Makali'i
11. Brandi Beudet - Crew on Makali'i, Passenger on Searcher
12. Kainalu Bertelmann - Working Crew on Searcher, Crew on Alakai
13. Pomai Bertelmann - Captain in Training, Apprentice Navigator on Makali'i, Passenger on Searcher
14. Lei Ilae-Kaleimamahu - Crew on Makali'i and Passenger on Searcher
15. Bonnie Kahapea - Captain in Training, Apprentice Navigator on Makali'i, Passenger on Searcher
16. Keani Kaleimamahu - Passenger on Searcher and Crew on Makali'i, La'au Healer, Lua Master
17. Keala Kahuanui - Quartermaster in Training on Makali'i Lanihuli Kanahale - Passenger on Searcher and Crew on Makali'i
18. Kealii Maielua - Captain in Training on Makali'i and Crew on Searcher
19. Jamie Makasobe - Documentor on Makali'i
20. Ui Malakaua - Captain in Training on Makali'i
21. Mike Manu - Captain in Training on Makali'i
22. Rosa Motta – crew on Makali'i, passenger on Searcher
23. 'Aina Paikai - Documentor on Searcher
24. Nakoa Prejean - Working Crew on Searcher, Crew on Alakai
25. Patti-Anne Solomon – crew on Makali'i, passenger on Searcher
26. Ah Lun Yung - Captain in Training on Makali'i

Note: A Resource Monitor will be traveling on the Searcher and is shared between this permit and EKF's permit.

Please see Edith Kanaka'ole's permit to reference other crew members aboard the Searcher as a part of our joint venture to voyage to Mokumanamana.

If a Resource Monitor is required, we will be sharing a monitor with the EKF permit. In the case that a Resource Monitor is required, we request that a crew member from Makali'i be trained to fulfill this role. If that is not possible, then we request a member of NOAA or OHA who are also practitioners and trained as monitors to be assigned to us, as they will also be required to participate in cultural protocols.

**Section B: Project Information**

**5a. Project location(s):**

- |  |  | Ocean Based                                       |  |
|--|--|---|--|
| <input type="checkbox"/> Nihoa Island                            | <input type="checkbox"/> Land-based            | <input checked="" type="checkbox"/> Shallow water | <input type="checkbox"/> Deep water            |
| <input checked="" type="checkbox"/> Necker Island (Mokumanamana) | <input checked="" type="checkbox"/> Land-based | <input checked="" type="checkbox"/> Shallow water | <input checked="" 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 type="checkbox"/> Midway Atoll                            | <input type="checkbox"/> Land-based            | <input 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                                   |  |   |  |

NOTE: Shallow water is defined by water less than 100 meters in depth.

Remaining ashore on any island or atoll (with the exception of Sand Island at Midway Atoll and field camp staff on other islands/atolls) between sunset and sunrise.

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

**Location Description:**

Mokumanamana is a small, isolated island remnant at the northwestern end of the main Hawaiian Island chain, within what is now called Papahānaumokuākea Marine National Monument (or the Northwestern Hawaiian Islands). Mokumanamana is located 240 km NW of Kaua‘i and have numerous cultural sites that are significant to the Hawaiian identity.

**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:**

The purpose of this trip is to confirm and complete the reconnection of Native Hawaiian cultural practitioners with this important part of Papahānaumokuākea.

Utilizing traditional voyaging canoes (Makali‘i) and wayfinding techniques to carry cultural practitioners to Mokumanamana will allow the participants of this voyage to assess the skills of voyage practitioners and contribute to the knowledge of the use of Mokumanamana as a measurement tool for the movements of our Hawaiian universe.

This capstone voyage for Makali‘i will help to ensure another generation of skilled voyagers that have knowledge of the Hawaiian universe from Moku O Keawe (Hawai‘i Island) to our kūpuna islands in the North (Papahānaumokuākea).

Through this experience the researchers hope to confirm techniques and methods learned that are specific to manamana and pahu manamana, which are sites that contain uprights connecting ali‘i/kāhuna to the site, to the upright, and to a celestial entity as a form of binding, essential to both an ali‘inui and kahuna nui’s existence. If the ali‘i or kāhuna could not be consistently present, a stone stood in place of the individual as a proxy. The research team will draw upon extensive mo‘olelo (stories), pule (incantations), mele (chants), ‘ōlelo no‘eau (proverbs), mo‘okū‘auhau (genealogies), ko‘ihonua (creation chants), and ‘aha rituals to inform our research. Within the last 3 years, the EKF was contracted by the Volcanoes National Park Service to conduct similar studies of sites called Pahu Manamana o ‘Umi at Pu‘u ‘Alikā on the southeastern slope of Maunaloa. Where Mokumanamana is located near the Ala Polohiwa a Kāne, Pahu Manamana o ‘Umi is oriented towards Nīhoa and Mokumanamana. During the celestial studies of Pahu Manamana o ‘Umi the researchers’ observations lead the team to some astonishing facts about the construction, alignment and orientation that particular site on Maunaloa has with particular star constellations, historical ali‘inui, and the Hale Poki found in the ‘Aha Lanalana ceremonies. At Pahu Manamana o ‘Umi, the research team was able to make a direct link to both ali‘inui ‘Umialīlio and Haho. The team is now ready to apply those same skills and techniques to Mokumanamana to finally bring all the loose pieces of information previously acquired to Mokumanamana.

As we continue to access the sites on Mokumanamana, clarity and understanding of the possible functions of the manamana can be ascertained. On this particular trip, celestial navigators and sailors will be joining the research team to provide expertise to the observations and alignments through rhumblines and wayfaring skills, which can be applied to the pānānā to manamana to celestial entities.

There will be one vessel (Searcher) traveling to Mokumanamana and back, a traditional Hawaiian double-hulled canoe (Makali‘i) sailing up and back down, and a radon (Alaka‘i) an escort to assist the canoe. Currently, there are no plans to go to Nīhoa unless it is necessary to take shelter on the lee of the island due to inclement weather, or for ceremonial protocols.

\*Considering the purpose of the proposed activities, do you intend to film / photograph federally protected species? Yes  No

If so, please list the species you specifically intend to target.  
native birds and ocean dwellers

For a list of terrestrial species protected under the Endangered Species Act visit:

<http://www.fws.gov/endangered/>

For a list of marine species protected under the Endangered Species Act visit:

<http://www.nmfs.noaa.gov/pr/species/esa/>

For information about species protected under the Marine Mammal Protection Act visit:

<http://www.nmfs.noaa.gov/pr/laws/mmpa/>

**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?**

All participants will be participating in 3 in-depth orientations, which includes boat safety, vessel procedures, hazardous open water procedures, emergency procedures on the vessels and Mokumanamana, cultural protocols, ceremonies and religious rituals, celestial and terrestrial orientation. Site description and research/study procedures, detailed camera use and on island procedures, traditional Hawaiian measurements, previous documentation of sites, compass use and compass procedures on island, GPS, rhumb lines, other alignment techniques. Also included in the trainings will be biological and ecological resource orientation, egg/chick avoidance, subsistence fishing while underway in the designated approved areas, gear preparation and packing procedures.

The group would like to request that, if a resource monitor is necessary that one or two of our members be designated the resource monitor. Both will be willing to participate in training and other requirements.

**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?**

This activity is aligned with the management direction of the Monument and with Presidential Proclamation 8031. The proposed activities are designed to enhance educational opportunities and will not be used for commercial purposes. All proposed knowledgeable and respected Native Hawaiian cultural practitioners, two navigators, and open ocean voyagers would conduct activities. The information gleaned by this joint venture will benefit the historical and resource study materials for Papahānaumokuākea. None of the proposed activities will deliberately cause harm or disruption to any resources on the island.

**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.**

Mokumanamana is a source of the Hawaiian origins, volcanology and migrational knowledge. It is the only moku of its kind where many original concepts of time, starlore, heiau site construction in relationship to stars and volcanoes exists. For these reasons, it is why Hawaiians must go to reconnect with that knowledge and connect it to Hawai‘i. Hawaiians do not have a lot of places that can be accessed that provides primary information. Sites have been built on Hawai‘i which function similarly, however they are all based on what the ancestors discovered and studied from Mokumanamana. Another primary source of knowledge is Voyaging, which includes navigating, star movement, the northern and southern movement of the sun, etc. Mokumanamana has also traditionally been the testing point for traditional navigation studies conducted at Ko‘a Holomoana, the piko site for Nā Kālai Wa‘a and the ‘ohana Makali‘i in Mahukona, Kohala. Our joint venture is bringing two primary sources of knowledge together to reformulate the Hawaiian universe of erudition.

To become a functioning and prosperous ali‘i nui, the primary sources of knowledge had to be maintained. The hint that maintaining primary sources is the necessity of tracking volcanic movement because the ali‘i nui and kāhuna knew where they had come from and also where they were going. Pele’s migration from the NW islands is a narrative that reminds us that primary sources are memorialized through chants and stories.

Storytellers weave the story to keep the story alive. However, the scientific mind had to put up manamana to get a fix on star locations to actually make the alignments with the volcanoes. Also, in the Polynesian Triangle, Mokumanamana is the only island within our Hawaiian Island chain that sits on the Ala Polohiwa a Kāne, the Tropic of Cancer. As a people who historically used the sun to navigate, make political decisions, and conduct religious ceremonies, Mokumanamana would have been a significant location. It makes sense that the first voyagers and later on kāhuna travelled to Mokumanamana intentionally to build sites upon it to track major celestial and volcanic cycles. Being able to sail to Mokumanamana and back to Hawai‘i utilizing the stars, then utilizing those same stars to track time and conduct special ceremonies is extremely significant. Sailing there with Makali‘i and being able to study the movements and alignments of the stars, planets and Milky Way provides an unprecedented opportunity to align chants, stories and native Hawaiian cultural remnants with one another to gain missing information from native Hawaiian history. Makali‘i’s successful voyage to Mokumanamana and back to Mahukona will also re-engage modern day voyagers with navigational practices that

haven't been successfully conducted for over 200 years. To become navigators, traditions in the Makali'i 'ohana state that the apprentice needed to voyage to and return successfully from Mokumanana leaving from Ko'a Holomoana in Mahukona. It is pertinent that the information acquired from these field visits is then restored and practiced remaining relevant to the youth of today. The solitude, lack of light, distance and human challenge to travel to the inhospitable island allows for potential growth of experience and expertise that is specific to the Hawaiian Islands. On this next site visit, specific stars, planets and Milky Way alignments to the various manamana will be part of the on-island studies conducted by the field team.

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

Adverse impacts are always a possibility, however the field researchers will try to minimize negative impacts. Voyaging activities to Mokumanamana and Nihoa are mainly ocean based and, with the exception of crew that are a part of the selected research team, the rest of the crew will remain onboard the vessels to minimize impact to the island itself. Continuing traditions of Mokumanamana as a place for practitioner testing and ascension of skills is necessary to the cultural relevance of voyaging, wayfinding and tracking of the movements of the skies and the islands themselves.

Within the EKF's 10-year research, the field team has seen significant degradation of the manamana due to bird activity, hurricane/storms, marine debris, and human activity through the changing climate and other movement. There is a sense of urgency to collect as much empirical data as possible before the sites are significantly changed or gone. Shapes of the manamana have changed over the years, which then changes the alignments and information acquired through observation.

It is a privilege to visit Mokumanamana, which to the team is a moku akua, a place for the gods. Humans should not go there often and only on special occasions.

All proposed activities will occur in the later afternoon and mid morning. The landing team plans to stage a base camp in a centralized area that is clear of nesting or burrowing birds. The base camp will be the point where the food and water will be staged. 5 teams of 3 individuals will camp in 5 locations and movement will be very minimal. To minimize impact the teams will stay in the designated locations to conduct the main observations.

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

The three evening time allotment requested for the on-island research in this application is sufficient to complete the activities intended for the duration of the summer solstice. The remaining 7 days of the permit are necessary for travel to and from the island.

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

Nā Kālai Wa'a has been voyaging and training voyagers and community members since 1995. Master Navigator Shorty Bertelmann, president of Nā Kālai Wa'a, was Papa Mau Piailug's first student in navigation and has been navigating since 1976. Master Navigator Chadd Paishon has



been voyaging since the 1980s and was inducted as a Pwo (Master Navigator) with Shorty Bertelmann by Mau Piailug in 2007. Voyagers of Nā Kālai Wa‘a have sailed on Makali‘i and other traditional voyaging canoes to Tahiti, Cook Islands, Micronesia, Japan, Aotearoa, and throughout the state of Hawai‘i.

The Kanaka'ole family has maintained unbroken through the impact and onslaught of colonization, decades of generational practices of hula, forest management, wa‘a traditions, Pele rituals, kuahu and heiau ceremonies. All of the members from the EKF research team have accessed Mokumanamana four or more times. The applicant group also possesses one hundred and eight years of combined cultural involvement between them. All participants have also been involved in both the Western & Hawaiian philosophies of academia through complex and extensive training & practice conducting ceremonies, research, collection of cultural, scientific, and historical data, translated literature from Hawaiian to English and were specifically chosen for their intelligence, passion, knowledge, physical endurance and ability to coexist while on long distanced and close quarter projects. All of the members of this participant group have been involved with Kaho‘olawe and are aware of the special protocols surrounding extremely sensitive and protected areas. Combined with the expertise and generational knowledge that NKW will bring with them, the potential to learn and collect more data is paramount to Mokumanamana's value to Hawaiians and to the peoples of Polynesia and Oceania.

**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.**

The EKF has some funding from various projects and donors, Nā Kālai Wa‘a has some funding from the Administration of Native Americans under the US Department of Health and Human Services (the voyage to Mokumanamana is the capstone in the 3 year long grant), and both organizations have started procedures to acquire the remaining funding from the Office of Hawaiian Affairs. Our OHA contacts are Keola Lindsey and Brad Wong.

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

All members of the research team are intimately familiar with various types of cultural sites throughout the Hawaiian Islands, Maupiti & Mo‘orea islands in Tahiti, and Mokumanamana. The research team has studied the uses, functions and positions to the respective environment, horizontally and vertically, and will conduct their studies on the island with the same method of familiarity. Previous visits by the research team to the islands have recorded cultural sites and these records will be used as a study tool to accessing the islands. Compass points will be established, and data will be collected on the rising and setting of the sun, moon and stars and will be measured according to the manamana at the times of the summer solstice. The proposed methods and procedures are in-line with accepted cultural behaviors and scientific methodologies and procedures.

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

The proposed vessels will comply with all regulations and be outfitted with a type-approved Vessel Monitoring System prior to the proposed departure date.

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

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

**ADDITIONAL FINDINGS FOR PROPOSED NATIVE HAWAIIAN PRACTICES**

**k. Explain how the activity is non-commercial and will not involve the sale of any organism or material collected.**

This is an educational and Native Hawaiian culture joint venture. The access is strictly for educational purposes. No organisms or natural materials will be collected on this access.

**l. Explain how the purpose and intent of the activity is appropriate and deemed necessary by traditional standards in the Native Hawaiian culture (pono), and demonstrate an understanding of, and background in, the traditional practice and its associated values and protocols.**

From June 14-23, 2019, the joint venture intends to go to Mokumanamana Island for the purposes of conducting Hawaiian cultural and spiritual practices and to acquire knowledge from the site as was done in its historical past. We seek to improve the quality of the relationship Native Hawaiians have with the environment on the ocean and on Mokumanamana. The team goes to honor Kāne worship, specific to the sun, moon and star movement. The joint venture will sail a traditional double hulled canoe to the island utilizing the stars, the landing party will align the stars to the sites on the island, the researchers will connect those alignments to the various akua, ali'i and kāhuna, and the team hopes to connect all those alignments back to the main Hawaiian Islands. The information gleaned will then be recorded into a document, which will be available for all future visitors to Papahānaumokuākea.

The successful voyage to Mokumanamana and return to Ko'a Holomoana in Mahukona, Kohala will also complete the the process of assessment and evaluation for apprentice captains and navigators for Makali'i. This process has not been conducted from Ko'a Holomoana for over 200 years.

**m. Explain how the activity benefits the resources of the Northwestern Hawaiian Islands and the Native Hawaiian community.**

As stated previously, making Mokumanamana's value relevant to today's Hawaiians and the peoples of Hawai'i is vital.

**n. Explain how the activity supports or advances the perpetuation of traditional knowledge and ancestral connections of Native Hawaiians to the Northwestern Hawaiian Islands.**

As stated previously, the information gained will benefit both the Western & Hawaiian philosophies of academia. The research will combine native Hawaiian ceremonies, research, collection of cultural, scientific, and historical data, with translated literature from Hawaiian to English. Combining western study with generational knowledge has the potential to further the learning paramount to Mokumanamana's value to Hawaiians and the peoples of Polynesia and Oceania.

o. Will all Monument resources harvested in the Monument be consumed in the Monument? If not, explain why not.

Only any fish that are caught for sustenance while in the monument will be consumed in the monument.

**8. Procedures/Methods:**

**Open Ocean Wayfinding & Papakū Makawalu**

Open Ocean Wayfinding utilizes knowledge of the celestial bodies, and other natural elements to guide voyagers, and allow navigators to pull islands out of the ocean. The concept of navigation is that the navigator is the center of the universe and that the elements move around them.

Navigators practice the magic of elemental relationships to assist in successfully pulling islands out of the ocean. Their ability to commune with marine and bird life, along with the clouds, winds, ocean swells, rain, and celestial bodies allows them to always know where they are in relationship to the world that surrounds them.

Papakū Makawalu is a paradigm that comes from the cosmogonic chant called the Kumulipo that systematically organizes the accumulated knowledge obtained through observations and interactions with the natural world and the natural systems over many generations. All knowledge and understanding of the Hawaiian environment was categorized into three distinct houses of learning: Papahulihonua, Papahulilani and Papanuihānaumoku. Papahulihonua covers all natural earth phenomena and cycles; Papahulilani covers all natural atmospheric phenomena and cycles; and Papanuihānaumoku covers all organisms, and any practices and relationships necessary to their survival. As an analytical methodology, Papakū Makawalu affords the modern Hawaiian researcher the ability to thoroughly investigate any subject or topic of Hawaiian epistemologies from multiple perspectives. As a pedagogy, Papakū Makawalu provides the educator with a holistic approach to teaching any Hawaiian topic, practice, or phenomena, which in turn, offers the learner deeper insight into the meaning of the Hawaiian Universe. Mele, Mo'olelo, Pule, and 'Ōlelo No'eau are deconstructed, analyzed and then reconstructed from each house of learning to examine the multiply faceted and holistic approach to understanding the mind of the ancients. Papakū Makawalu has become the methodology that the research team has been utilizing to understand Mokumanamana and the Pahu Manamana o 'Umi on Maunaloa. We intend to use it again and will be training the new research and crewmembers this methodology for our fieldwork.

Documentation with Kawai Productions will be conducted using DSLR camera, drones, and other equipment. These activities are being covered by a separate Special Ocean Use permit application. Kawai Productions has been contracted by NKW to document Project Hanauna Ola, producing a ten-minute video documenting each year of the project. This third year's video is focused on documenting the capstone voyage to Mokumanamana. Jamie Makasobe and 'Āina Paikai of Kawai Productions have both been to the Monument previously and have both trained as voyagers.

Fishing methods used during this voyage to Mokumanamana could include hand-lines while under sail using traditional and contemporary style of lures, handline while at anchorage, free dive with 3 prong spears and net, and pole fishing. Regulations for fishing will be followed, and only enough fish will be caught for sustenance of crew while in the Monument.

NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding.

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

Common name:

Scientific name:

Hawaiian name:

# & size of specimens:

Collection location:

Whole Organism  Partial Organism

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

N/A

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

N/A

- General site/location for collections:
- 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 or specimens be transported out of the Monument?**

N/A

**11. Describe any fixed or semi-permanent structures or installations, or cultural offerings you plan to leave in the Monument:**

Tarps and bevi bags will be used for temporary structures. ‘Awa will be the only offering that will be left in the ocean and on the land. Cordage offerings will be made far out to sea before reaching the island. This cordage is symbolic of the piko that connects Hawai’i Island with Mokumanamana.

**12. List all specialized gear and materials to be used in the proposed activities:**

Aside from gps, laser pointers, cameras, compasses, ropes, tarps, and water jugs, there will be no other specialized gear or materials utilized.

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

N/A

**14. Describe collaborative activities to share samples, cultural research and/or knowledge gained in the Monument:**

The EKF research team will generate a report with the assistance of NKW.

**15a. Will you produce any publications, educational materials or other deliverables?**

X Yes  No

**15b. Provide a time line for write-up and publication of information or production of materials:**

June 2020.

**16. If applicable, list all Applicants' publications directly related to the proposed project:**  
N/A at this time

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:

NOAA/Inouye Regional Center  
NOS/ONMS/PMNM/Attn: Permit Coordinator  
1845 Wasp Blvd, Building 176  
Honolulu, HI 96818  
FAX: (808) 455-3093

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

## **Papahānaumokuākea Marine National Monument Compliance Information Sheet**

**1. Updated list of personnel to be covered by permit. List all personnel names and their roles here (e.g. John Doe, Diver; Jane Doe, Field Technician, Jerry Doe, Medical Assistant):**

Milton Gervin "Shorty" Bertelmann – Master Navigator  
Chadd Paishon – Master Navigator  
Pualani Lincoln-Mai'elua – Training Captain/Navigator  
Kealii Maielua – Training Captain  
Bonnie Kahapea – Crew on Makalii  
Patti-Anne Solomon – Crew on Makalii  
Mike Manu – Crew on Makalii  
Leiohu Colburn-Santos – Crew on Makalii  
Keala Kahuanui – Crew on Makalii  
Lei Ilae-Kaleimamahu – Crew on Makalii  
Leimana Spencer – Crew on Makalii  
Ah Lun Yung – Crew on Makalii  
Mahina Paishon – Crew on Makalii  
Chelsey Dickson – Crew on Makalii  
Lanihuli Kanahale – Crew on Makalii  
Jamie Makasobe – Project Documenter  
Aina Paikai – Project Documenter  
Kristen Lehua Dircks Ah Sam – Project Director  
Nakoa Prejean – Crew on Alakai  
Kainalu Bertelmann – Crew on Alakai  
Ashton Dircks Ah Sam – Crew on Alakai

**2. Specific Site Location(s): (Attach copies of specific collection locations):**

Mokumanamana with the Edith Kanaka'ole Foundation. Anchorage on the South West side of the island with the EKF vessel Searcher.  
Anchorage off of Nihoa (for navigation purposes)

**3. Other permits (list and attach documentation of all other related Federal or State permits):** Permit Application – Special Ocean Use  
OMB Control # 0648-0548

**3a. For each of the permits listed, identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation. n/a**

**4. Funding sources (Attach copies of your budget, specific to proposed activities under this permit and include funding sources. See instructions for more information):**

ANA SEDS Grant – Project Hanauna Ola  
OHA Papahānaumokuākea Program Funding \$25,000

**5. Time frame:**

Activity start: June 14, 2019

Activity completion: June 24, 2019

Dates actively inside the Monument:

From: June 15, 2019

To: June 23, 2019

Describe any limiting factors in declaring specific dates of the proposed activity at the time of application:

Weather could be a limiting factor for our de

Personnel schedule in the Monument:

The entire crew listed under personnel will be in the monument during the dates stated.

**6. Indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument:**

All Personnel are covered by DAN membership insurance as well as their personal health insurance. Vessels and activities involving Makalii and Alakai are covered by Na Kalai Wa'a's insurance policies.

**7. Check the appropriate box to indicate how personnel will enter the Monument:**

Vessel

Aircraft



Provide Vessel and Aircraft information:

Makali'i: 54' double hulled voyaging canoe

Alaka'i: 29' single hulled Radon, diesel powered twin engines. HA0449YB

**8. The certifications/inspections (below) must be completed prior to departure for vessels (and associated tenders) entering the Monument. Fill in scheduled date (attach documentation):**

- Rodent free, Date: 6/11/19
- Tender vessel, Date: 6/11/19
- Ballast water, Date: 6/11/19
- Gear/equipment, Date: 6/11/19
- Hull inspection, Date: 6/11/19

**9. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):**

Vessel name: Makali'i

Vessel owner: Nā Kālai Wa'a

Captain's name: Shorty Bertelmann

IMO#:

Vessel ID#: HAZ6237FF495-H

Flag: US

Vessel type: traditional double hulled voyaging canoe

Call sign: WCQ4292

Embarkation port: Kawaihae

Last port vessel will have been at prior to this embarkation: Kawaihae

Length: 54ft

Gross tonnage: 8 tons

Total ballast water capacity volume (m3): n/a

Total number of ballast water tanks on ship: 0

Total fuel capacity: n/a

Total number of fuel tanks on ship: n/a

Marine Sanitation Device: n/a

Type: 5

Vessel name: Alaka'i

Vessel owner: Nā Kālai Wa'a

Captain's name: Shorty Bertelmann

IMO#:

Vessel ID#: RDU280020678

Flag: US

Vessel type: Radon

Call sign:

Embarkation port: Kawaihae

Last port vessel will have been at prior to this embarkation: Kawaihae

Length: 28'

Gross tonnage: 3 tons

Total ballast water capacity volume (m3): n/a

Total number of ballast water tanks on ship: 0

Total fuel capacity: 200 gal

Total number of fuel tanks on ship: 1

Marine Sanitation Device: none

Type: I

Explain in detail how you will comply with the regulations regarding discharge in the Monument. Describe in detail. If applicable, attach schematics of the vessel's discharge and treatment systems:

Other fuel/hazardous materials to be carried on board and amounts:

Only diesel fuel for Alakai and gasoline for the outboard motor on Makalii

Provide proof of a National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS). Provide the name and contact information of the contractor responsible for installing the VMS system. Also describe VMS unit name and type:

Installer: Navtech

Unit Name and Type: Faria Watch Dog 750 VMS

VMS Email:

Inmarsat ID#:

\* Individuals MUST ENSURE that a type-approved VMS unit is installed and that its automatic position reports are being properly received by the NOAA OLE system prior to the issuance of a permit. To make sure your VMS is properly configured for the NOAA OLE system, please contact NOAA OLE at (808) 725-6110 or (808) 725-6100.

\* PERMITS WILL NOT BE ISSUED TO INDIVIDUALS ENTERING THE MONUMENT VIA VESSEL UNTIL NOAA OLE HAS CONTACTED THE MONUMENT PERMIT COORDINATOR WITH A 'POSITIVE CHECK' READING.

## 10. Tender information:

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? List the number of tenders/skiffs aboard and specific types of motors:

Any transportation of personnel or gear will be conducted with the tenders from the Searcher who is listed under the EKF permit, and accompanying Na Kalai Waa as a voyage partner to Mokumanamana.

### **Additional Information for Land Based Operations**

**11. Proposed movement of personnel, gear, materials, and, if applicable, samples:**

n/a

**12. Room and board requirements on island: n/a**

**13. Work space needs: n/a**

**DID YOU INCLUDE THESE?**

- Map(s) or GPS point(s) of Project Location(s), if applicable
- Funding Proposal(s)
- Funding and Award Documentation, if already received
- Documentation of Insurance, if already received
- Documentation of Inspections
- Documentation of all required Federal and State Permits or applications for permits

DAVID IGE  
GOVERNOR OF HAWAII



SUZANNE CASE  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT MASUDA  
FIRST DEPUTY

KALEO MANUEL  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF AQUATIC RESOURCES  
1151 PUNCHBOWL STREET, ROOM 330  
HONOLULU, HAWAII 96813

May 24, 2019

TO: Division of Aquatic Resources File

THROUGH: Suzanne Case, Chairperson

FROM: Maria Carnevale  
Papahānaumokuākea Marine National Monument

SUBJECT:

DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPAHAANAUMOKUĀKEA MARINE NATIONAL MONUMENT NATIVE HAWAIIAN PRACTICES PERMIT TO MS. KEOMAILANI CASE, NĀ KĀLAI WA'Ā FOR ACCESS TO STATE WATERS TO CONDUCT TRAINING SAILS ON THE MAKALI'I AND CULTURAL RESEARCH ACTIVITIES UNDER PERMIT PMNM-2019-009

The following permitted activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200, HAR:

Project Title:

Papahānaumokuākea Marine National Monument Native Hawaiian Practices Permit to Ms. Keomailani Case, Nā Kālai Wa'a for Access to State Waters to Conduct Training Sails on the Makali'i and Cultural Research Activities

Permit Number: PMNM-2019-009

Project Description:

Ms. Keomailani Case proposes to conduct training sails to Mokumanamana from a traditional double-hulled voyaging canoe using non-instrumented navigation. A second motor vessel would escort the voyaging canoe for safety. While at Mokumanamana, personnel will conduct research on the relationship of terrestrial markers with celestial movements during the summer solstice. This work will be in conjunction with separately permitted individuals under the direction of Ms. Pualani Kanahale (PMNM-2019-007). Researchers will also use handheld camera equipment as well as a DJI Phantom III to record celestial movements and document archaeological sites. The total group of 34 individuals including two PWO Master Navigators and numerous trainees, and researchers would access the Monument aboard traditional voyaging canoe Makali'i and her escort vessel Alaka'i owned and operated by Nā Kālai Wa'a. Proposed activity dates are from June 14 – June 29, 2019.

ITEM F-3c

While in the Monument activities would consist of conducting cultural research and protocols (offering ho'okupu (gifts of liquid 'awa), oli (chants) and pule (prayers) in the near shore waters of both Nihoa and Mokumanamana; swimming and snorkeling activities to compare the MHI and NWHI marine reef systems; sustenance (federal waters) and subsistence (state waters) fishing, and anchoring overnight on sandy substrate only at Nihoa and Mokumanamana.

In order to reduce human impacts to Mokumanamana, the applicant would abide by Monument Special Conditions and Rules for Moving Between Islands/Atolls and Packing for Field Camps (BMP #007). No cooking or fires will be utilized on island. Permitted personnel would be escorted at all times by an approved Monument appointed resource monitor, experienced and trained to safely access Mokumanamana with no adverse impact to native species or cultural sites. Each team of three individuals will be escorted to their study location and set up camp after determining that no protected species will be adversely affected. Each team will have a radio to maintain communications with remaining participants and the M/V Searcher. No more than 17 personnel from both the Kanahale and Case permits (15 researchers and 2 resource monitors) would be present on land at any time. All solid wastes will be removed from the island. Landing on the island would only occur when no Hawaiian monk seals and sea turtles are present at the landing sites. Furthermore, all personnel would avoid all areas where Hawaiian monk seals and sea turtles haul out.

Fishing activities would include hand-lines while under sail using traditional and contemporary style of lures, handline while anchored on sandy substrates, free diving with three pronged spears and hand net, and pole fishing with lines up to 100 feet. The line would be monitored at all times and personnel would abide by – Seabird Protocols Necessary for Conducting Trolling Research and Monitoring (PMNM Best Management Practice #008) to reduce impacts to seabirds. Spear fishing would abide by a blue ocean rule meaning that a diver could only shoot where there was a blue ocean background to avoid inadvertently striking non-prey species of fish and coral. All fishing gear would be removed from the water if any Hawaiian monk seals or sea turtles are observed. All fish caught would be consumed within the Monument. Ms. Case's activities are further detailed in her permit application.

All activities will be non-intrusive and performed in a culturally appropriate manner while adhering to Monument Best Management Practices (BMP). To safeguard Monument resources the applicant would abide by the following BMPs while conducting the aforementioned activities within the PMNM: Best Management Practices for Boat Operations and Diving Activities (BMP #004); Disease and Introduced Species Prevention (BMP#011); Minimizing Impacts to Land Birds (BMP # 012).

The proposed activities are in direct support of the Monument Management Plan's priority management need 3.1 – Understanding and Interpreting the NWHI (through action plan 3.1.2 – Native Hawaiian Culture and History). This action plan calls for the conduct, support, and facilitation of Native Hawaiian cultural access and research of the NWHI. It specifically notes support for cultural research that helps in understanding ancestral connections related to the Monument. Activities to support “enhancing, incorporating, and perpetuating understanding of Native Hawaiian culture and knowledge”, such as those being proposed, are also addressed in the Monument Management Plan Environmental Assessment (December 2008) which resulted in a FONSI. In addition, this EA notes that “identifying research needs, supporting Native Hawaiian cultural access, and incorporating Native Hawaiian traditional knowledge and associated practices into Monument management” could have beneficial effects on Monument resources (PMNM MMP Vol 2, p.192).

Consulted Parties:

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since May 27th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

Exemption Determination:

After reviewing HAR § 11-200-(8), including the criteria used to determine significance under HAR § 11-200-12, DLNR has concluded that the activities under this permit would have minimal or no significant effect on the environment and that issuance of the permit is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

1. All activities associated with this permit, including using Native Hawaiian practices to document summer solstice at Mokumanmana, have been evaluated as a single action. As a preliminary matter, multiple or phased actions, such as when a group of actions are part of a larger undertaking, or when an individual project is precedent to or represents a commitment to a larger project, must be grouped together and evaluated as a single action. HAR § 11-200-7. This permit does not involve an activity that is precedent to a later planned activity.

2. The Exemption Class for Basic Data Collection with no Serious or Major Environmental Disturbance Appears to Apply. Chapter 343, HRS, and section 11-200-8, HAR, provide for a list of classes of actions exempt from environmental assessment requirements. HAR §11-200-8.A.5. specifically exempts the class of actions which involve "basic data collection, research, experimental management, and resource evaluation activities, which do not result in a serious or major disturbance to an environmental resource." This exemption class has been interpreted to include natural resource observations, such as those being proposed.

The proposed sky, land, and ocean evaluation activities here appear to fall squarely under the exemption class #5, exempt item #4 as described under the former Fish and Game Division exemption list published in January 19, 1976. The Native Hawaiian practices of observing and documenting natural resource states are considered data collection. As discussed below, no significant disturbance to any environmental resource is anticipated through the act of observing the Monument resources. Thus, so long as the below considerations are met, an exemption class should include the action now contemplated.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if "the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment." HAR § 11-200-8.B. To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any

expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. HAR § 11-200-12. Examples of actions which commonly have a significant effect on the environment are listed under HAR § 11-200-12.

Since PMNM designation, this is the sixth project proposed to date aimed at documenting celestial alignments and the 4<sup>th</sup> for training sails. The prior permits that have involved these activities have had no deleterious effects on Monument resources. No significant impacts are anticipated as a result of the proposed access and observation techniques especially since the techniques proposed are non invasive and do not involve the handling of resources to complete the activity. All activities will be conducted in a manner compatible with the management direction of the Monument Proclamation in that the activities do not diminish monument resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects. The joint permit review process did not reveal any anticipated indirect or cumulative impacts, nor did it raise any cultural concerns, that would occur as a result of these activities.

The culmination of these permits, occurring throughout the Monument over a 2-week period, is not anticipated to have significant cumulative impacts.

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts will Probably be Minimal and Insignificant. Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all research activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources of the Monument as required by Presidential Proclamation 8031, other applicable law and agency policies and standard operating procedures.

Conclusion. Upon consideration of the permit to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS and Chapter 11-200 HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.