

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

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

**ADDITIONAL IMPORTANT INFORMATION:**

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

**INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED**

Send Permit Applications to:

Papahānaumokuākea Marine National Monument Permit Coordinator

6600 Kalaniana'ole Hwy. # 300

Honolulu, HI 96825

nwhipermit@noaa.gov

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

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

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

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

### **Summary Information**

**Applicant Name:** Charles Littnan

**Affiliation:** NOAA Fisheries, Pacific Islands Fisheries Science Center, Hawaiian Monk Seal Research Program

**Permit Category:** Conservation and Management

**Proposed Activity Dates:** 8/1/16-7/31/17

**Proposed Method of Entry (Vessel/Plane):** NOAA RV Oscar Elton Sette or Hi'ialakai, Midway Flight

**Proposed Locations:** Nihoa, Mokumanamana, French Frigate Shoals, Laysan Island, Lisianski Island, Pearl and Hermes Reef, Midway Atoll

**Estimated number of individuals (including Applicant) to be covered under this permit:** 4

**Estimated number of days in the Monument:** 56

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

a.) The proposed activity would...

Use the APH-22 Hexacopter for environmental and natural resource monitoring in the Northwestern Hawaiian Islands (NWHI). Specifically, the unmanned aerial system (UAS) will support monitoring and surveying of marine mammals and marine debris (and potentially other flora and fauna) in the areas of Nihoa, Mokumanamana, French Frigate Shoals, Laysan, Lisianski, Pearl and Hermes Reef and Midway Atoll.

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

Utilize the UAS to meet the resource protection and management requirements of the Papahānaumokuākea Marine National Monument. We will deploy (hand launch) the UAS platform to survey select sites within the NWHI for Hawaiian monk seal population and health assessments, marine debris detection, and surveying Tern Island to document entrapment threats to wildlife. The UAS would fly at altitudes below 500 feet. Specific altitudes at certain locations will vary and are identified below.

Specific goals for this project include:

- 1) Continue to assess the ability of the systems to operate discreetly with minimal disturbance to sensitive seabird colonies or marine mammals.
- 2) Conduct population surveys of monk seals using UAS primarily at Nihoa and Mokumanamana.
- 3) Conduct aerial survey of Tern Island to assess degradation of island infrastructure and identify entrapment and other hazards to wildlife.
- 4) Develop techniques for photogrammetry (body condition assessment) for monk seals.
- 5) Potentially other efforts as requested by PMNM partners.

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

Providing the ability to survey resources on the remote islands without (1) interference; (2) the potential for the introduction of invasive species; and (3) human disturbance to the natural resources. The UAS would increase the monitoring and surveying capacity in the Monument. This effort will also ensure that counts of Hawaiian monk seals are successfully completed each year at Nihoa and Mokumanamana. These two locations account for 20% of the NWHI population of seals and have become important populations. Limited access to these sites undermine our ability to estimate population trends at Necker and Mokumanamana and develop survival enhancement strategies for monk seals across the archipelago.

**Other information or background:**

The UAS will be launched and recovered from land, the NOAA Ship, Oscar Elton Sette, or one of the ships' launches and/or rigid hulled inflatables and flown at altitudes below 500 feet. Specific altitudes and special considerations for each location are specified below.