



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Monterey Bay National Marine Sanctuary
99 Pacific Street, Building 455A
Monterey, California 93940

MONTEREY BAY NATIONAL MARINE SANCTUARY RESEARCH PERMIT

Permittee:

Chris Scholin, Ph.D.
Monterey Bay Aquarium Research Institute
7700 Sandholdt Road
Moss Landing, CA 95039

Permit Number: MBNMS-2019-019

Effective Date: December 2, 2019

Expiration Date: December 31, 2020

Project Title: Monterey Bay Aquarium Research Institute (MBARI) Unmanned Aircraft Systems (UAS) Program

This permit is issued for activities in accordance with the National Marine Sanctuaries Act (NMSA), 16 USC §§ 1431 *et seq.*, and regulations thereunder (15 CFR Part 922). All activities must be conducted in accordance with those regulations and law. No activity prohibited in 15 CFR Part 922 is allowed except as specified in the activity description below.

Subject to the terms and conditions of this permit, the National Oceanic and Atmospheric Administration (NOAA), Office of National Marine Sanctuaries (ONMS) hereby authorizes the permittee listed above to conduct research activities within Monterey Bay National Marine Sanctuary (MBNMS or sanctuary). All activities are to be conducted in accordance with this permit and the permit application received July 29, 2019 and all subsequently received information. The permit application is incorporated into this permit and made a part hereof; provided, however, if there are any conflicts between the permit application and the terms and conditions of this permit, the terms and conditions of this permit shall be controlling.

Permitted Activity Description:

The following activities are authorized by this permit:

Flying Unmanned Aerial Systems (UAS) at no less than 60 meters above sea level (ASL) within specific NOAA Regulated Overflight Zones in MBNMS (with deviations only for launching and landing/recovery) to support MBARI's Research, Marine Operations, and Education and Outreach efforts. See Special Terms and Conditions for further details.

No further activities prohibited by sanctuary regulations are allowed.

Permitted Activity Location:

The permitted activity is allowed only in the following location(s):

within NOAA Regulated Overflight Zones offshore of Moss Landing and Santa Cruz /Davenport



Special Terms and Conditions:

1. All authorized activities may be conducted during daylight hours from December 2, 2019 through December 31, 2020. All equipment shall be removed no later than the expiration date of this permit. The permittee may request an amendment from the MBNMS Superintendent in advance of this expiration date, to extend the effective date of this permit.
2. All low overflight activities shall be conducted with the planned UAS identified in the permit application including A FlightWave Edge VTOL (Vertical Take Off and Landing) aircraft, 3D Robotics Iris+ or a simple commercial multirotor camera drone by DJI Commercial Drones (i.e. Phantom, Matrice, or Mavic) or a long duration fixed wing aircraft called "Believer. Helicopters or manned planes are not permitted.
3. When operating within NOAA Regulated Overflight Zones (see attached map) of Monterey Bay National Marine Sanctuary the authorized UAS can operate at or above 60 meters above ground level (AGL) except as specified below:
 - (a) **Año Nuevo Island:** The authorized UAS will not conduct low overflights within one (1) nautical mile of Año Nuevo Island.
 - (b) **Elkhorn Slough:** The authorized UAS will not conduct low overflights within the NOAA Regulated Overflight Zone over the Sanctuary's jurisdiction waters of Elkhorn Slough east of the Highway One bridge to Elkhorn Road.
 - (c) **Big Sur:** The authorized UAS will not conduct low overflights within the NOAA Regulated Overflight Zone offshore of Big Sur which extends from the Carmel River mouth to Cambria from the mean high water line to 3 nautical miles offshore.
4. The following **pre-flight notifications** are required: Not less than 3 days prior to any aerial survey, the permit holder must notify the contact below by email with the applicable Sanctuary permit number (MBNMS-2019-019), the purpose of the flight, the flight plan (including areas covered by flight, scheduled dates and times of flight), type of UAS used and the names of the pilot(s).

POINT OF CONTACT	AFFILIATION	CONTACT INFO
Sophie De Beukelaer	MBNMS Permits	sophie.debeukelaer@noaa.gov

5. UAS will not be operated within 0.25 nautical miles from large off-shore rocks and islands that are exposed above mean high tide
6. UAS will avoid approaching marine mammal aggregations within 1000 feet.
7. The UAS will avoid approaching marine mammal haulouts or at-sea marine mammal aggregations within 1000ft.
8. No activity authorized by this permit shall disturb or impact any historical or marine archaeological resources of the sanctuary. If historical or marine archaeological

resources are encountered at any time, the permittee shall cease all further activities under this permit and immediately contact the MBNMS Superintendent.

9. Aircrafts shall increase altitude to a non-threatening distance at the request of the MBNMS Superintendent or sanctuary designee, if they conclude that flight operations are in danger of creating a disturbance to seabirds, marine mammals, or other natural resources of MBNMS.
10. UAS overflight operations shall be conducted in a manner that avoids disturbance of marine wildlife (e.g. marine mammals, sea otters and roosting birds) in the sanctuaries.
11. The UAS should not be deployed if rafting seabirds are present within 1640 feet (500 meters) of the vessel from which the UAS will be launched.
12. All systems will be clearly marked to indicate that they are a part of a research project and how to return the equipment to the owner or permittee in case of equipment loss.
13. If contacted by MBNMS Sanctuary Integrated Monitoring Network (SIMoN) staff, the permittee agrees to provide project metadata from these permitted activities to SIMoN via a web-based interface. The permittee shall provide the information to SIMoN within three (3) months of the request date. See <http://www.sanctuariesimon.org> for more information.
14. The permittee shall submit a final report of all activities conducted under this permit to the MBNMS Permit Coordinator no later than January 31, 2021. The report should include information regarding daily activities such as type of vehicle flown with flight track lines (GIS files such as *.kmz, *.shp, or *.gpx) and altitudes, discovery or disturbance of historical artifacts, problems encountered, equipment lost and noise monitoring data collected during various sea state conditions for each of the UAS types. Raw footage captured during permitted low overflights shall be made available to the Sanctuaries for educational, non-commercial use as requested. The report shall also include a synopsis of research results to date and will include specific detailed observations of wildlife disturbances or lack of disturbances.
15. Any scientific publications and/or reports resulting from activities conducted under the authority of this permit must include the notation that the activity was conducted under permit number MBNMS-2019-019. Copies of/or links to any publications that result from work conducted under this permit shall be submitted Sophie De Beukelaer, MBNMS Permit Coordinator (sophie.debeukelaer@noaa.gov). Additionally, the permittee is required to acknowledge during any media coverage (press releases, video/photo, social media, or other means) that research activities occurred within the sanctuaries and under permit.
16. This activity may also require permission from other agencies. Any direct or incidental harassment of marine mammals requires a permit from the NMFS (contact Penny Ruvelas, the Long Beach Office Branch Chief of the Protected Resources Division, at 562-980-4197 or at Penny.Ruvelas@noaa.gov) and/or U.S. Fish and Wildlife Service

(USFWS) (contact the Ventura USFWS office at 805-644-1766). Direct or incidental harassment of seabirds requires a permit from the USFWS.

17. The permittee may be required to pay any or all expenses associated with the locating of and/or removal by NOAA or its designee of any equipment that is not recovered by the permittee including possible whale entanglement issues that may require a federal response.

General Terms and Conditions:

1. Within 30 (thirty) days of the date of issuance, the permittee must sign and date this permit for it to be considered valid. Once signed, the permittee must send copies, via mail or email, to the following individual:

Sophie DeBeukelaer
Permit Coordinator
Monterey Bay National Marine Sanctuary
99 Pacific Street, Building 455A
Monterey, California 93940
Sophie.DeBeukelaer@noaa.gov

2. It is a violation of this permit to conduct any activity authorized by this permit prior to the ONMS having received a copy signed by the permittee.
3. This permit may only be amended by the ONMS. The permittee may not change or amend any part of this permit at any time. The terms of the permit must be accepted in full, without revision; otherwise, the permittee must return the permit to the sanctuary office unsigned with a written explanation for its rejection. Amendments to this permit must be requested in the same manner the original request was made.
4. All persons participating in the permitted activity must be under the supervision of the permittee, and the permittee is responsible for any violation of this permit, the NMSA, and sanctuary regulations for activities conducted under, or in conjunction with, this permit. The permittee must assure that all persons performing activities under this permit are fully aware of the conditions herein.
5. This permit is non-transferable and must be carried by the permittee at all times while engaging in any activity authorized by this permit.
6. This permit may be suspended, revoked, or modified for violation of the terms and conditions of this permit, the regulations at 15 CFR Part 922, the NMSA, or for other good cause. Such action will be communicated in writing to the applicant or permittee, and will set forth the reason(s) for the action taken.
7. This permit may be suspended, revoked or modified if requirements from previous ONMS permits or authorizations issued to the permittee are not fulfilled by their due date.

8. Permit applications for any future activities in the sanctuary or any other sanctuary in the system by the permittee might not be considered until all requirements from this permit are fulfilled.
9. This permit does not authorize the conduct of any activity prohibited by 15 CFR Part 922, other than those specifically described in the "Permitted Activity Description" section of this permit. If the permittee or any person acting under the permittee's supervision conducts, or causes to be conducted, any activity in the sanctuary not in accordance with the terms and conditions set forth in this permit, or who otherwise violates such terms and conditions, the permittee may be subject to civil penalties, forfeiture, costs, and all other remedies under the NMSA and its implementing regulations at 15 CFR Part 922.
10. Any publications and/or reports resulting from activities conducted under the authority of this permit must include the notation that the activity was conducted under National Marine Sanctuary Permit MBNMS-2019-019 and be sent to the ONMS official listed in general condition number 1.
11. This permit does not relieve the permittee of responsibility to comply with all other federal, state and local laws and regulations, and this permit is not valid until all other necessary permits, authorizations, and approvals are obtained. Particularly, this permit does not allow disturbance of marine mammals or seabirds protected under provisions of the Endangered Species Act, Marine Mammal Protection Act, or Migratory Bird Treaty Act. Authorization for incidental or direct harassment of species protected by these acts must be secured from the U.S. Fish and Wildlife Service and/or NOAA Fisheries, depending upon the species affected.
12. The permittee shall indemnify and hold harmless the Office of National Marine Sanctuaries, NOAA, the Department of Commerce and the United States for and against any claims arising from the conduct of any permitted activities.
13. Any question of interpretation of any term or condition of this permit will be resolved by NOAA.

Your signature below, as permittee, indicates that you accept and agree to comply with all terms and conditions of this permit. This permit becomes valid when you, the permittee, countersign and date below. Please note that the expiration date on this permit is already set and will not be extended by a delay in your signing.



Chris Scholin, Ph.D.
President
Monterey Bay Aquarium Research Institute



Date



Paul Michel
Superintendent
Monterey Bay National Marine Sanctuary

12219
Date

1 document(s) attached: Map of NOAA Regulated Overflight Zones

