



DoD Activity in the Papahānaumokuākea Marine National Monument

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Coral Reef Research Advisory Committee on 2 February, 2017

Overall Classification of this Briefing is

UNCLASSIFIED



UNITED STATES PACIFIC FLEET

Where it Matters, When it Matters, With What Matters



Agenda

- **Introduction and Purpose**
 - Proclamations and Dept. of Defense (DoD) Activities
- **DoD Activities in and around the Marine National Monument**
 - DoD Training Areas
 - DoD – Training Activities
 - DoD – Testing Activities
 - Impacts of DoD Activities
 - Navy Pollution and Discharge Restrictions
- **Navy’s Marine Species Monitoring Program**
 - Navy Environmental Stewardship Video
 - Navy Marine Research and Monitoring
- **Questions?**

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Proclamations and DoD

- **#8031: (on the lands and in waters 0-50 NM surrounding Northwest Hawaiian Islands).**
- **#9478: (50-200 NM surrounding Northwest Hawaiian Islands west of 163° West Longitude).**
 - Prohibitions shall not apply to activities and exercises of the Armed Forces that are consistent with applicable laws.
 - Ensure, by the adoption of appropriate measures not impairing operations or operation capabilities, that its vessels and aircraft act in a manner consistent, so far as is practicable, with this proclamation.
 - Using established mitigation measures for training and testing required through MMPA/ESA authorizations.
 - Prohibitions... shall not apply to activities necessary to respond to emergencies threatening life, property or the environment, or to activities necessary for law enforcement purposes.
 - Doesn't limit military use/control of any property under administrative control of the military or limit availability for military mission purposes.
 - In the event of threatened or actual destruction/loss/injury to resource...[from spills/groundings by DoD or USCG]...promptly coordinate with Secretaries [Commerce & Interior] to respond and mitigate harm...if possible, restore or replace the Monument resource or quality.
- **DoD training and testing activities are analyzed under the National Environmental Policy Act (NEPA), Marine Mammal Protection Act (MMPA), and Endangered Species Act (ESA), accordingly.**

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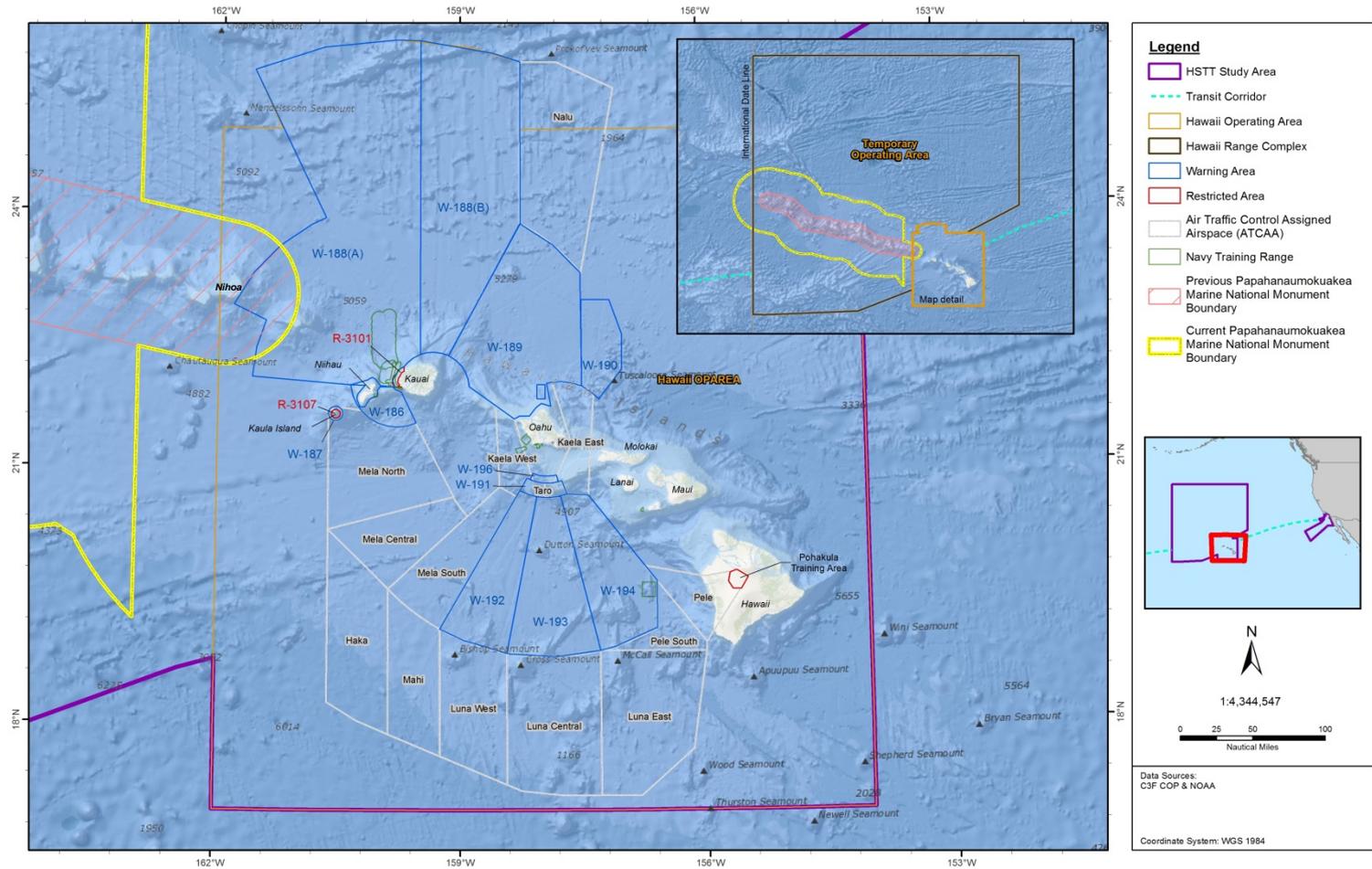
Proclamations and DoD

- Proclamation #9478 is an expansion of the monument designated in Proclamation #8031
- Both proclamations allow for responses in relation to emergencies.
- The expansion includes language that makes clear that the Armed Forces maintains control of any property under their administrative control, in the case where DoD owns property within a monument.
- The Proclamation discusses sunken military vessels and aircraft that are found within the geographic boundaries of the Monument Expansion:
 - DoD retains control of the property despite being within the monument.
 - Includes ships sailing through, aircraft flying through or when DoD goes in response to an emergency within the Monument. DoD retains control of assets and control of decision making in the execution of that mission.
- Both proclamations require that in the event of threat or actual injury to the resource, it is necessary for the DoD to respond and mitigate the harm.
- There have been no incidents in the monument (under either proclamation) to date.

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DoD Training Areas



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DoD - Training Activities

- Predominately, Navy activities are opportunistic training by individual ships transiting to/from the Western Pacific on deployment. U.S. Marine Corps activities within the Monument are done in conjunction with the Navy on Navy vessels and/or assets.
 - Minimal individual ship activities – the majority of training is done within the Hawaii Operating Area for which only a small part overlaps the Monument.
- Provide emergency response support when authorized.
 - Summer 2014 – Navy ship transiting through the area supported transport of NMFS biologists off island when a hurricane threatened.
- Sunken Military Craft Act.
 - Navy retains title to vessels while in Navy service.
 - Responsible for protecting; any person who proposed to disturb, remove, or injure sunken military craft under Navy jurisdiction must obtain a permit.
 - Reports of release of petroleum products from these vessels are evaluated by a Navy decision panel.
- Navy presence in transit can act as a deterrent to illegal activities.
- USCG provides patrols in the Monument typically during the annual transits to service the Aids to Navigation on Midway. USCG C-130 aircraft from Barbers Point provide maritime patrol coverage in the Monument.

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DoD - Testing Activities

- In most instances, periodic multi-range test events include support from the Pacific Missile Range Facility (PMRF) on Kauai.
 - The Temporary Operating Area (TOA) is activated in conjunction with a USCG Notice to Mariners (NOTMAR) and FAA Notice to Airmen (NOTAM) when required for specific test events; for a majority of the DoD tests in the TOA, there is no entry or overflight of the Monument.
 - Infrequent missile overflight of the Monument for test events (i.e. Missile Defense Agency Targets and USAF Minuteman-III).
 - Extremely low probability of an off-nominal trajectory resulting in impact in Monument.
 - Extensive flight safety analysis is completed and missiles configured with a certified Flight Termination System (FTS) to ensure no risk to personnel or vessels in the Monument.
 - Infrequent stationing of a Navy ship in the Monument that is firing a missile for test events on PMRF; extensive flight safety analysis and installation of a certified FTS.
 - Infrequent stationing of vessels with sensors for data collection during test events.

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Impacts of DoD Activities

- The majority of the training activities are conducted east of Nihoa Island in the Hawaii Operating Area and inside the eastern edge of the monument boundaries. The DoD avoids impacting National Monument resources and qualities to the maximum extent practicable.
- No impacts to the resources are expected within the Monument and World Heritage Site. Most stressors from training and testing activities would create temporary, localized and infrequent impacts.
 - Long term impacts to corals, fish, marine mammals, sea turtles and sea bird populations would not occur.
- No submerged cultural resources are expected to be affected.

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U.S. Navy Pollution and Discharge Restrictions

- The U.S. Navy ships have discharge policies and restrictions that are applicable worldwide.
- Navy policy allows for the discharge of pulped food products, paper, and cardboard beyond 3 NM from land.
 - These policies are in place to control vermin aboard ship due to food waste storage or associated with food contaminated paper products.
 - They are also necessary to reduce fire hazard shipboard from stored cardboard.
- Navy policy is strict in that it does not allow for plastics to be disposed of at sea from either surface craft or submarines.

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Navy Environmental Stewardship

- Environmental Stewardship Video

<http://www.hstteis.com/RelatedMaterials/NavyEnvironmentalStewardshipVideos.aspx>

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Navy Marine Research and Monitoring

- NMFS issued Navy a Letter of Authorization (LOA) for the HSTT EIS/OEIS MMPA and BO under the ESA in January 2014 and again in April 2015 (after re-initiating consultation).
- Pacific Fleet funds marine species monitoring in all Pacific Range Complexes (Gulf of Alaska, PACNORWEST, SOCAL, HRC, MIRC) as required under the LOAs, BOs and in support of environmental planning.
- Navy funding to other programs: Office of Naval Research and Living Marine Resources program for marine species research in Hawaii and other geographic areas.

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Navy Marine Research and Monitoring

Current goals and methods:

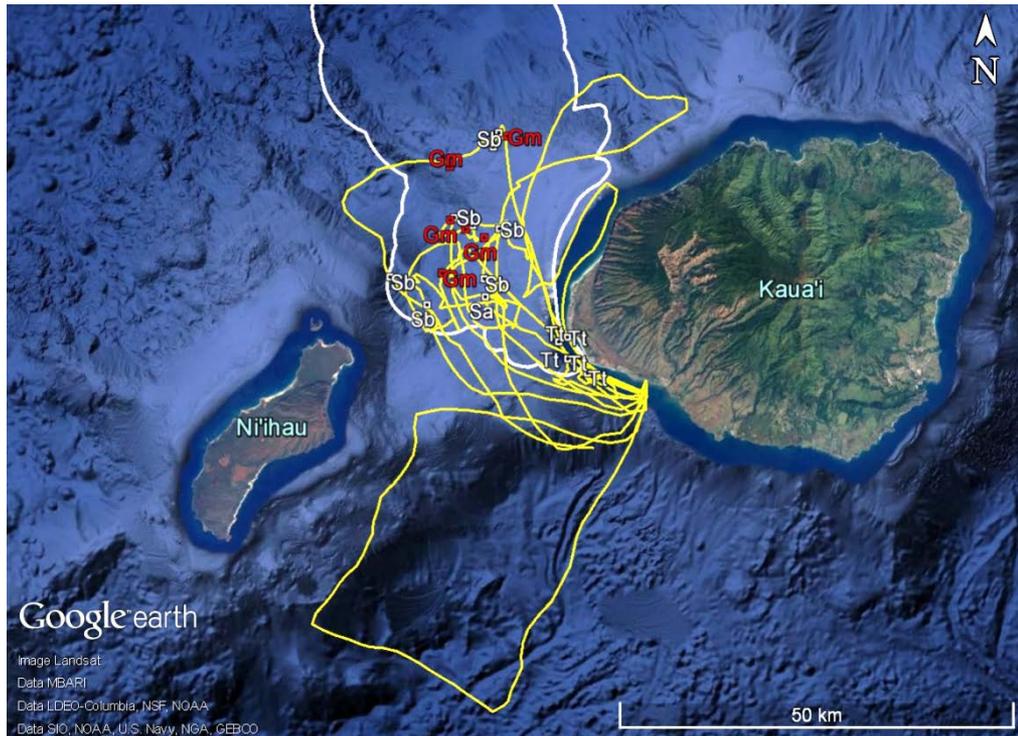
- Overarching goals: species occurrence, exposure and response.
- Methods include visual (vessel), passive acoustics (Pacific Missile Range Facility's (PMRF) range hydrophones and autonomous recording devices (e.g. gliders, Ecological Recording Devices), tagging, photo-identification and biopsy.
- Tagged animals move throughout the archipelago and provide distribution data for Northwest Hawaiian Islands and Main Hawaiian Islands populations.
- PMRF hydrophones: unique tool to gather marine mammal acoustic and data to investigate all three goals.
 - Marine mammal movements obtained using vessels, tags and acoustics to estimate exposure and behavioral response.
 - Density estimation of Blainville's beaked whales.
 - Animal kinematics and long term trends.
- Data also used by Navy and NMFS for abundance, density estimation and stock assessment.

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Navy Marine Research and Monitoring

Visual/tagging/biopsy example



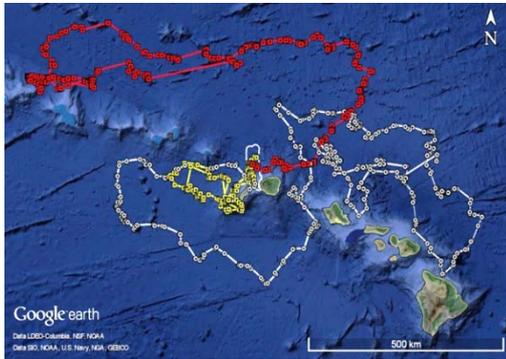
- February 2016 tracklines (yellow) of small-vessel, five-day field effort and sighting locations (symbols with species abbreviations as labels).
- Sighting locations may represent the same individuals observed more than once.
- White line is approximate hydrophone range boundary.
- Sightings of humpback whales are not shown as most groups were not approached.

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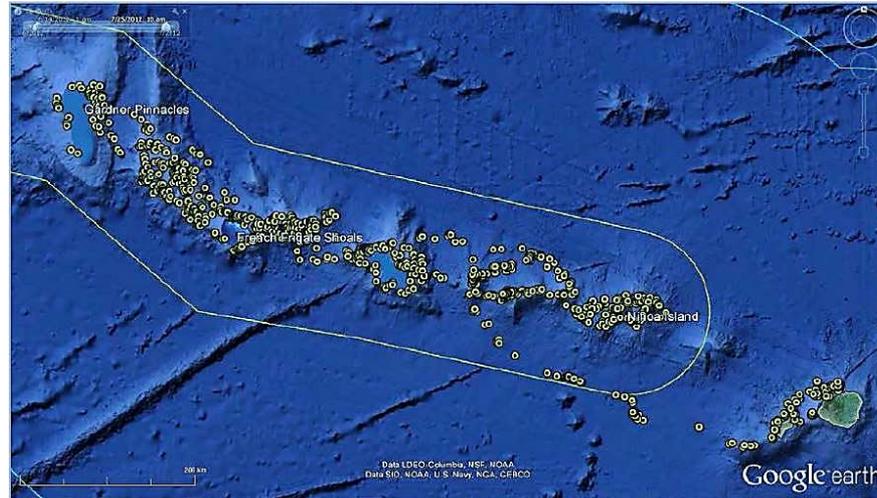


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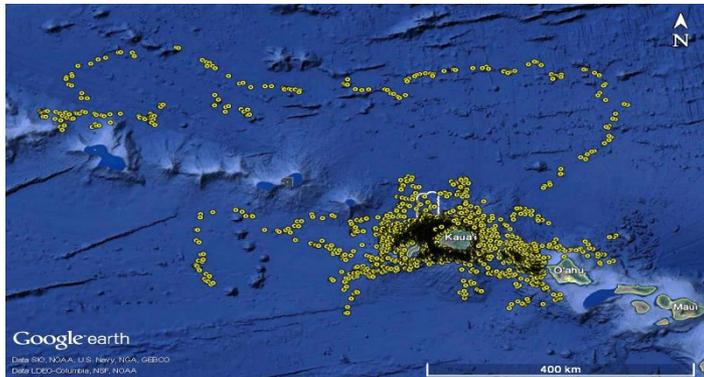
Tag tracks



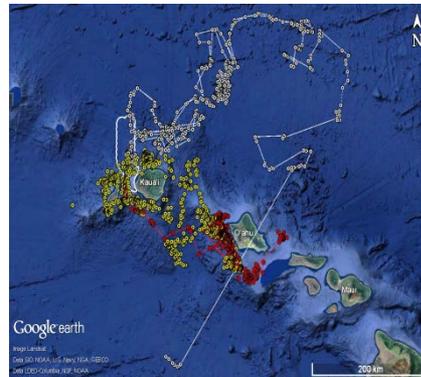
Feb 2015 - 3 pilot whales



Feb 2013 - 1 false killer whale



Compiled from 2013-2016 - 19 pilot whales



Sep 2015 - 2 pilot whales

- Example sighting plots where animals satellite tagged off Kauai at some point passed through the Monument
- Each dot represents an Argos tag location obtained when the animal surfaces *and* enough satellites are overhead
- Plots represent time spans of up to 4 month tag attachments

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Navy Marine Research and Monitoring

Pacific Marine Assessment Program for Protected Species – PACMAPPS:

- Agreement between Navy, NOAA, BOEM and FWS to collaborate on line transect surveys in the Pacific.
- Data to be collected on marine mammals, sea turtles and seabirds.
- First assessment is the Hawaiian Islands Cetacean and Ecosystem Assessment Survey (HICEAS) to be conducted summer of 2017 in the HI Economic Exclusion Zone.
- Survey will update species abundance, stock and density estimates used by all agencies and feed Navy/BOEM environmental compliance.

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Navy Marine Research and Monitoring

Minke whales (*Balaenoptera acutorostrata*) respond to navy training

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SPAWAR Systems Center Pacific, 53560 Hull Street, San Diego, California 92152-5001, USA



Conducted in support of the U.S. Navy's Hawaii-Southern California Training and Testing 2014 Annual Monitoring Report

ASSESSMENT OF MODELED RECEIVED SOUND PRESSURE LEVELS AND MOVEMENTS OF SATELLITE-TAGGED ODONTOCETES EXPOSED TO MID-FREQUENCY ACTIVE SONAR AT THE PACIFIC MISSILE RANGE FACILITY: FEBRUARY 2011 THROUGH FEBRUARY 2013

FINAL REPORT

Robin W. Baird¹, Stephen W. Martin², Daniel L. Webster¹,
and Brandon L. Southall²

Impacts of U.S. Navy Training Events on Blainville's Beaked Whale (*Mesoplodon densirostris*) Foraging Dives in Hawaiian Waters

Roanne Manzano-Roth,¹ E. Elizabeth Henderson,¹ Stephen W. Martin,²
Cameron Martin,² and Brian M. Matsuyama²

Marine Mammal Science



MARINE MAMMAL SCIENCE, 29(1): 142–158 (January 2013)
© 2012 by the Society for Marine Mammalogy
DOI: 10.1111/j.1748-7692.2011.00561.x

Estimating minke whale (*Balaenoptera acutorostrata*) boing
sound density using passive acoustic sensors

Occurrence and Habitat Use of Foraging Blainville's Beaked Whales (*Mesoplodon densirostris*) on a U.S. Navy Range in Hawaii

E. Elizabeth Henderson,¹ Stephen W. Martin,²
Roanne Manzano-Roth,¹ and Brian M. Matsuyama²

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Navy Marine Research and Monitoring

www.navymarinespeciesmonitoring.us/

U.S. Navy Annual Monitoring Reports to NMFS

<http://www.lmr.navy.mil/>

Living Marine Resources Program

<http://www.onr.navy.mil/en/Science-Technology/Departments/Code-32/All-Programs/Atmosphere-Research-322/Marine-Mammals-Biology.aspx>

ONR Marine Mammals and Biology Program

<http://hstteis.com/>

Hawaii-Southern California EIS/OEIS

(includes 2013-2018 LOA and BO from NMFS)

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Discussion & Questions?



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