



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

LETTER OF AUTHORIZATION

The Chief of Naval Operations, Department of the Navy, 2000 Navy Pentagon, Washington, D.C. 20350-2000, and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to Navy operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar in accordance with 50 CFR Part 218, Subpart X—Taking of Marine Mammals Incidental to Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar subject to the provisions of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*; MMPA) and the following conditions:

1. This Authorization is valid for the period August 15, 2012, through August 14, 2013.
2. This Authorization is valid only for the unintentional taking of the species of marine mammals identified in 50 CFR § 218.230(b) and Condition 5 of this Authorization governing the taking of these animals incidental to the activity specified in Condition 3. This authorization shall be valid only for take consistent with the provisions in 50 CFR § 218.232 and the terms of this Authorization as specified in this Authorization.
3. This Authorization is valid only for activities associated with the operation of the SURTASS LFA Sonar onboard the United States Naval Ship (USNS) ABLE (T-AGOS 20). The signals transmitted by the SURTASS LFA sonar source must be between 100 and 500 Hertz (Hz) with a source level for each of the 18 projectors at no more than 215 decibels (dB) re: 1 micro Pascal (μPa) at 1 meter (m) root mean square (rms)) with a maximum duty cycle of 20 percent.
4. This Authorization, combined with Authorizations for the USNS VICTORIOUS (T-AGOS 19), USNS EFFECTIVE (T-AGOS 21), and USNS IMPECCABLE (T-AGOS 23), is valid for an estimated total of 20 nominal active sonar missions among the four SURTASS LFA sonar vessels (or equivalent shorter missions but not to exceed a total of 432 hours of transmit time per vessel during the period of effectiveness of this Authorization) within the following areas:
 - (a) Up to 16 nominal missions in the northwestern Pacific Ocean which includes the following operational areas: east of Japan; the North Philippine Sea; the west Philippine Sea; offshore Guam; the Sea of Japan; the East China Sea; the South China Sea; and offshore Japan (25° to 40° N and 10° to 25° N).

USNS ABLE



- (b) Up to 4 nominal missions in the Hawaii Range Complex which includes the northern and southern Hawaii operational areas.

SPECIES AUTHORIZED AND LEVEL OF TAKE

5. The incidental take of marine mammals under the activity identified in Conditions 3 and 4 of this Authorization is limited to the following species:
- (a) **Mysticetes:** blue whale (*Balaenoptera musculus*), Bryde's whale (*Balaenoptera edeni*), fin whale (*Balaenoptera physalus*), gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*), minke whale (*Balaenoptera acutorostrata*), northern Pacific right whale (*Eubalena japonica*), pygmy right whale (*Capera marginata*), sei whale (*Balaenoptera borealis*), and southern right whale (*Eubalaena australis*).
- (b) **Odontocetes:** Baird's beaked whale (*Berardius bairdii*), Blainville's beaked whale (*Mesoplodon densirostris*), common bottlenose dolphin (*Tursiops truncatus*), Cuvier's beaked whale (*Ziphius cavirostris*), Dall's porpoise (*Phocoenoides dalli*), dwarf sperm and pygmy sperm whales (*Kogia simus* and *K. breviceps*), false killer whale (includes Hawaii pelagic and insular stocks) (*Pseudorca crassidens*), Fraser's dolphin (*Lagenodelphis hosei*), Gervais' beaked whale (*Mesoplodon europaeus*), ginkgo-toothed beaked whale (*Mesoplodon ginkgodens*), Gray's beaked whale (*Mesoplodon grayi*), Hector's beaked whale (*Mesoplodon hectori*), Hubbs' beaked whale (*Mesoplodon carhubbsi*), Indo-Pacific bottlenose dolphin (*Tursiops aduncus*), killer whale (*Orca orcinus*), long-beaked common dolphin (*Delphinus capensis*), Longman's beaked whale (*Indopacetus pacificus*), melon-headed whale (*Peponocephala electra*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), pantropical spotted dolphin (*Stenella attenuata*), Perrin's beaked whale (*Mesoplodon perrini*), pygmy beaked whale (*Mesoplodon peruvianus*), pygmy killer whale (*Feresa attenuata*), Risso's dolphin (*Grampus griseus*), rough-toothed dolphin (*Steno bredanensis*), short-beaked common dolphin (*Delphinus delphis*), short-finned pilot whale (*Globicephala macrorhynchus*), Sowerby's beaked whale (*Mesoplodon bidens*), spade-toothed beaked whale (*Mesoplodon traversii*), sperm whale (*Physeter macrocephalus*), spinner dolphin (*Stenella longirostris*), Stejneger's beaked whale (*Mesoplodon stejnegeri*), strap-toothed beaked whale (*Mesoplodon layardii*), striped dolphin (*Stenella coeruleoalba*), and True's beaked whale (*Mesoplodon mirus*).
- (c) **Pinnipeds:** Hawaiian monk seal (*Monachus shauinslandi*)
6. The taking of marine mammals by the Holder of this Authorization is limited to the incidental taking of marine mammal species identified in Condition 5 by Level A and Level B harassment (as defined in the MMPA and 50 CFR § 216.3) within those areas authorized under Condition 4. The take, by harassment, that occurs during the year covered by this Authorization may not exceed the amount identified in Attachment 2.
7. Taking of marine mammal species not listed under Condition 5 by harassment, injury, or mortality, or the taking by mortality of any marine mammal species listed under Condition 5 is prohibited.

MITIGATION

8. The Holder of this Authorization, and any individuals operating under his authority, must conduct the activity identified in 50 CFR § 218.230 and Condition 3 of this Authorization in a manner that minimizes, to the greatest extent practicable, adverse impacts on marine mammals, their habitats, and the availability of marine mammals for subsistence. When conducting operations identified in 50 CFR § 218.230, the following mitigation measures must be implemented:

- (a) The Holder of this Authorization, and any individuals operating under his authority, must not broadcast the SURTASS LFA sonar signal at a frequency greater than 500 Hz.
- (b) Through mitigation described under 50 CFR § 218.234 and Condition 9 (Mitigation Monitoring) of this Authorization, the Holder of this Authorization and any individuals operating under his authority must ensure, to the greatest extent practicable, that no marine mammal is subjected to a sound pressure level of 180 dB re: 1 μ Pa (rms) or greater.
- (c) **LFA Sonar Mitigation Zone:** Prior to commencing and during SURTASS LFA sonar transmissions, the Holder of this Authorization will use near-real-time environmental data and underwater acoustic prediction models to determine the propagation of the SURTASS LFA sonar signals in the operating area. The Holder must determine the distance from the SURTASS LFA sonar source to the 180-dB re: 1 μ Pa isopleth (rms) (i.e., the LFA sonar mitigation zone) in order to comply with Condition 8(b).
 - (i) The Holder will update these sound field estimates every 12 hours, or more frequently when meteorological or oceanographic conditions change.
- (d) **Additional 1-km Buffer Zone:** The Holder of this Authorization will establish a one-kilometer (1-km) buffer zone around the LFA sonar mitigation zone.
- (e) **Ramp-Up Procedures for the HF/M3 System:** The Holder of a Letter of Authorization will ramp up the High Frequency / Marine Mammal Monitoring (HF/M3) active sonar referenced in 50 CFR § 218.234 from a power level beginning at a maximum source sound pressure level of 180 dB re: 1 μ Pa (rms) in 10-dB increments to operating levels over a period of no less than five minutes:
 - (i) At least 30 minutes prior to any SURTASS LFA sonar transmission;
 - (ii) Prior to any SURTASS LFA sonar calibrations or testing that are not part of regular SURTASS LFA sonar transmissions described in 50 CFR § 218.230; and
 - (iii) Anytime after the Holder of this Authorization has powered-down the HF/M3 active sonar source for more than two minutes.
 - (iv) The Holder of a Letter of Authorization will not increase the HF/M3 active sonar system's sound pressure level once they detect a marine mammal. The Holder may resume a ramp-up of the HF/M3 sonar system once marine mammals are no longer detected by the HF/M3 active sonar system, passive acoustic monitoring, or visual monitoring described in Condition 9.

- (f) **Suspension/Delay for SURTASS LFA Sonar Transmissions:** If the Holder of this Authorization detects a marine mammal through monitoring required under 50 CFR § 218.235 and Condition 9 within either the LFA sonar mitigation zone or the 1-km buffer zone around the surveillance vessel, the Holder will immediately suspend or delay SURTASS LFA transmissions.
- (g) **Resumption of SURTASS LFA Sonar Transmissions:** The Holder of this Authorization may resume/commence SURTASS LFA sonar transmissions 15 minutes after:
- (i) All marine mammals have left the LFA sonar mitigation zone and the 1-km buffer zone around the surveillance vessel; and
 - (ii) There is no further detection of any marine mammal within the LFA sonar mitigation zone plus the 1-km buffer zone as determined by the visual, passive or active acoustic monitoring protocols described in 50 CFR § 218.235 and Condition 9.
- (h) **Geographic Restrictions:** The Holder of this Authorization will not operate SURTASS LFA sonar such that the SURTASS LFA sonar sound field exceeds 180 dB re: 1 μ Pa (rms):
- (i) At a distance of less than or equal to 22 km (14 miles (mi); 22 nautical miles (nm)) from any coastline, including offshore islands.
 - (ii) At a distance of less than or equal to 1 km (0.62 mi; 0.54 nm) seaward of the outer perimeter of any offshore biologically important area for marine mammals designated in 50 CFR § 218.234(f)(2) and described in Condition 8(h)(iii) during the period specified.
 - (iii) The Offshore Biologically Important Areas (OBIA) for marine mammals (with specified periods) for SURTASS LFA sonar operations are:

OBIA	Period of Effectiveness
Georges Bank	Year-round
Roseway Basin Right Whale Conservation Area	June through December, annually
Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS)	January 1 to November 14, annually
Southeastern U.S. Right Whale Seasonal Habitat	November 15 to April 15, annually
North Pacific Right Whale Critical Habitat	March through August, annually
Silver Bank and Navidad Bank	December through April, annually
Coastal waters of Gabon, Congo and Equatorial Guinea	June through October, annually
Patagonian Shelf Break	Year-round
Southern Right Whale Seasonal Habitat	May through December, annually
Central California NMSs	June through November, annually
Antarctic Convergence Zone	October through March, annually

Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk	June through November, annually
Coastal waters off Madagascar	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
Madagascar Plateau, Madagascar Ridge, and Walters Shoal	November through December, annually
Ligurian-Corsican-Provençal Basin and Western Pelagos Sanctuary in the Mediterranean Sea	July to August, annually
Hawaiian Islands Humpback Whale NMS and Penguin Bank	November through April, annually
Costa Rica Dome	Year-round
Great Barrier Reef Between 16° S and 21° S	May through September, annually
Bonney Upwelling on the southern coast of Australia	December through May, annually
Northern Bay of Bengal and Head of Swatch-of-No-Ground	Year-round
Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon	Olympic NMS: December, January, March, and May, annually The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually
Abrolhos Bank	August through November

Note: See § 218.234(f)(2) and Attachment 1 for coordinate information.

- (i) **Operational Exception for SURTASS LFA Sound Field in OBIA's:** During military operations, SURTASS LFA sonar transmissions may exceed 180 dB re: 1 μ Pa (rms) within the boundaries of an OBIA, including operating within an OBIA, when the Holder of this Authorization determines that it is: 1) operationally necessary to continue tracking an existing underwater contact; or 2) operationally necessary to detect a new underwater contact within the OBIA. This exception does not apply to routine training and testing with the SURTASS LFA sonar systems.
- (j) **Mission Planning:** The Holder of this Authorization must maintain a running calculation/estimation of takes of each species over the effective period of these regulations. The Holder of this Authorization will plan all SURTASS LFA sonar missions to ensure that no more than 12 percent of any marine mammal stock listed in 50 CFR § 218.230(b)(1) through (3) would be taken by Level B harassment annually. This annual per-stock cap of 12 percent applies regardless of the number of LFA sonar vessels operating. The Holder of this Authorization must coordinate with the Holder of the Letters of Authorization issued to the USNS VICTORIOUS, USNS EFFECTIVE, and the USNS IMPECCABLE, to ensure that this condition is met for all vessels combined.

MITIGATION MONITORING

9. The Holder of this Authorization, and any individuals operating under his authority, must:
 - (a) Perform the following for visual mitigation monitoring:
 - (i) Marine mammal biologists qualified in conducting at-sea marine mammal visual monitoring from surface vessels will train and qualify designated ship personnel as lookouts to conduct at-sea visual monitoring.
 - (ii) Train the lookouts in the most effective means to ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if they spot marine mammals.
 - (iii) Conduct visual monitoring from the ship's bridge during daylight hours (30 minutes before sunrise until 30 minutes after sunset) during operations that employ SURTASS LFA sonar in the active mode. Maintain a topside watch with standard binoculars (7x) and with the naked eye.
 - (b) Perform the following for passive acoustic monitoring:
 - (i) Use the low frequency, passive SURTASS sonar system to listen for vocalizing marine mammals; and
 - (c) Perform the following for active acoustic monitoring:
 - (i) Use the HF/M3 active sonar to locate and track marine mammals in relation to the SURTASS LFA sonar vessel and the sound field produced by the SURTASS LFA sonar source array, subject to the ramp-up requirements in § 218.234(e) and Condition 8(e).
10. Mitigation monitoring under Conditions 9(a), (b), and (c) must:
 - (a) Commence at least 30 minutes before the first SURTASS LFA sonar transmission (30 minutes before sunrise for visual monitoring);
 - (b) Continue between transmission pings; and
 - (c) Continue for at least 15 minutes after completion of the SURTASS LFA sonar transmission exercise (30 minutes after sunset for visual monitoring), or if marine mammals are showing abnormal behavioral patterns, for a period of time until behavior patterns return to normal or conditions prevent continued observations.

MONITORING

11. The Holder of this Authorization for activities described in 50 CFR § 218.230 must:
 - (a) Cooperate with the NMFS and any other federal agency for monitoring the impacts of the activity on marine mammals; and
 - (b) Designate qualified on-site individuals to conduct the mitigation, monitoring and reporting activities specified in this Letter of Authorization.

12. The Holder of this Authorization will conduct all monitoring required under the Letter of Authorization to increase knowledge of the affected marine mammal species. The Holder of this Authorization must:
- (a) Convene a Scientific Advisory Group (SAG) to analyze different types of monitoring/research that could increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises.
 - (b) Continue to assess data from the Marine Mammal Monitoring Program and work toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances. Any portions of the analyses conducted by these scientists based on these data that are determined to be unclassified after appropriate security reviews will be made publically available.
 - (c) Continue to explore the feasibility of coordinating with other fleet assets and/or range monitoring programs to include the use of SURTASS LFA sonar towed horizontal line arrays to augment the collection of marine mammal vocalizations before, during, and after designated exercises.
 - (d) Continue to collect ambient noise data and explore the feasibility of declassifying and archiving the ambient noise data for incorporation into appropriate ocean noise budget efforts.

REPORTING

13. The Holder of this Authorization must:

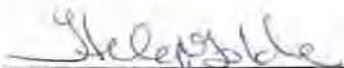
- (a) Provide a status update to the NMFS when the Holder submits the next annual application on efforts to assess the data collected by its undersea arrays and progress toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances.
- (b) Draft a plan of action outlining a strategy for implementing the Scientific Advisory Group's (SAG) recommendations for going forward with beaked whale and/or harbor porpoise research; or describe in writing why such research is not feasible/or is unlikely to increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises, to be followed by a meeting with NMFS to discuss any other potential options.
- (c) Systematically observe SURTASS LFA sonar operations for injured or disabled marine mammals and monitor the principal marine mammal stranding networks and other media to correlate analysis of any whale strandings that could potentially be associated with SURTASS LFA sonar operations.
 - (i) The Holder will ensure that the NMFS is notified immediately or as soon as clearance procedures allow if an injured, stranded, or dead marine mammal is found during or shortly after, and in the vicinity of, any SURTASS LFA operations. The Holder will report the incident to the Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Jeannine.Cody@noaa.gov.

- (ii) The Holder will provide the NMFS with species or description of the animal(s), the condition of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available).
 - (iii) In the event that an injured, stranded, or dead marine mammal is found by the Holder that is not in the vicinity of, or found during or shortly after SURTASS LFA sonar operations, the Holder will report the same information to NMFS as listed above as soon as operationally feasible and clearance procedures allow.
- (d) In the event of a ship strike by the SURTASS LFA sonar vessel, at any time or place, the Holder must:
- (i) Immediately, or as soon as clearance procedures allow, report to the NMFS the species identification (if known), location (lat/long) of the animal (or the strike if the animal has disappeared), and whether the animal is alive or dead (or unknown);
 - (ii) Report the incident to the Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Jeannine.Cody@noaa.gov;
 - (iii) Report to the NMFS as soon as operationally feasible the size and length of the animal, an estimate of the injury status (e.g., dead, injured but alive, injured and moving, unknown, etc.), vessel class/type and operational status;
 - (iv) Report to the NMFS the vessel length, speed, and heading as soon as feasible; and
 - (v) Provide the NMFS a photo or video, if equipment is available.
- (e) Submit classified and unclassified quarterly mission reports to the Director, Office of Protected Resources, NMFS, no later than 30 days after the end of each quarter beginning on the date of effectiveness of a Letter of Authorization or as specified in the appropriate Letter of Authorization. Each quarterly mission report will include all active-mode missions completed during that quarter. At a minimum, each classified mission report must contain the following information:
- (i) Dates, times, and location of each vessel during each mission;
 - (ii) Information on sonar transmissions during each mission and records of any delays or suspensions;
 - (iii) Location of the SURTASS LFA sonar mitigation and buffer zones in relation to the LFA sonar array;
 - (iv) Marine mammal observations including animal type and/or species, number of animals sighted, date and time of observations, type of detection (visual, passive acoustic, HF/M3 sonar), bearing and range from vessel, abnormal behavior (if any), and remarks/narrative (as necessary).
 - (v) The report will include the Navy's estimates of the percentages of marine mammal stocks affected (both for the quarter and cumulatively for the year

covered by the Authorization) by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on operating locations, dates/times of operations, system characteristics, oceanographic environmental conditions, and animal demographics.

- (vi) In the event that no SURTASS LFA sonar missions are completed during a quarter, a report of negative activity will be provided.
- (f) Submit an annual, unclassified report to the Director, Office of Protected Resources, NMFS, no later than 45 days after expiration of this Authorization. At a minimum, the annual report will contain the following:
- (i) An unclassified summary of the year's quarterly reports;
 - (ii) The Navy's estimates of the percentages of marine mammal stocks affected by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on operating locations, dates/times of operations, system characteristics, oceanographic environmental conditions, and animal demographics.
 - (iii) An analysis of the effectiveness of the mitigation measures with recommendations for improvements where applicable;
 - (iv) An assessment of any long-term effects from SURTASS LFA sonar operations; and
 - (v) Any discernible or estimated cumulative impacts from SURTASS LFA sonar operations.
14. The Holder of this Authorization must comply with the Terms and Conditions of the Incidental Take Statement corresponding to the Endangered Species Act Biological Opinion issued to the Navy and the National Marine Fisheries Service's Office of Protected Resources, Permits and Conservation Division.
15. A copy of this Authorization must be in the possession of the Officer in Charge of the Military Detachment (MILDET) on board the USNS ABLE in order to conduct the activity under the authority of this Letter of Authorization and Incidental Take Statement.

AUG 15 2012



Helen M. Golde, Acting Director
Office of Protected Resources
National Marine Fisheries Service

Date

Attachment 1 – Table 1 OBIA Coordinates

Name of Area	Location of Area	Months of Importance
Georges Bank	40°00'N, 72°30'W 39°37'N, 72°09'W 39°54'N, 71°43'W 40°02'N, 71°20'W 40°08'N, 71°01'W 40°04'N, 70°44'W 40°00'N, 69°24'W 40°16'N, 68°27'W 40°34'N, 67°13'W 41°00'N, 66°24'W 41°52'N, 65°47'W 42°20'N, 66°06'W 42°18'N, 67°23'W	Year-round
Roseway Basin Right Whale Conservation Area	43°05'N, 65°40'W 43°05'N, 65°03'W 42°45'N, 65°40'W 42°45'N, 65°03'W	June through December, annually
Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS)	41°00.000'N, 69°05.000'W 42°09.000'N, 67°08.400'W 42°53.436'N, 67°43.873'W 44°12.541'N, 67°16.847'W 44°14.911'N, 67°08.936'W 44°21.538'N, 67°03.663'W 44°26.736'N, 67°09.596'W 44°16.805'N, 67°27.394'W 44°11.118'N, 67°56.398'W 43°59.240'N, 68°08.263'W 43°36.800'N, 68°46.496'W 43°33.925'N, 69°19.455'W 43°32.008'N, 69°44.504'W 43°21.922'N, 70°06.257'W 43°04.084'N, 70°21.418'W 42°51.982'N, 70°31.965'W 42°45.187'N, 70°23.396'W 42°39.068'N, 70°30.188'W 42°32.892'N, 70°35.873'W 42°07.748'N, 70°28.257'W 42°05.592'N, 70°02.136'W 42°03.664'N, 69°44.000'W 41°40.000'N, 69°45.000'W	January 1 to November 14, annually
Southeastern U.S. Right Whale Seasonal Habitat	Critical Habitat Boundaries are coastal waters between 31°15' N and 30°15'N from the coast out 15 nautical miles (nmi); and the coastal waters between 30°15' N and 28°00'N from the coast out 5 nmi. (50 CFR §226.13(c)) OBIA Boundaries are coastal waters between 31°15'N and 30°15'N from 12 to 15 nmi.	November 15 to April 15, annually
North Pacific Right Whale Critical Habitat	57°03'N, 153°00'W 57°18'N, 151°30'W 57°00'N, 151°30'W 56°45'N, 153°00'W (50 CFR §226.215)	March through August, annually

Name of Area	Location of Area	Months of Importance
Silver Bank and Navidad Bank	Silver Bank: 20° 38.899'N, 69° 23.640'W 20° 55.706'N, 69° 57.984'W 20° 25.221'N, 70° 00.387'W 20° 12.833'N, 69° 40.604'W 20° 13.918'N, 69° 31.518'W 20° 28.680'N, 69° 31.900'W Navidad Bank: 20° 15.596'N, 68° 47.967'W 20° 11.971'N, 68° 54.810'W 19° 52.514'N, 69° 00.443'W 19° 54.957'N, 68° 51.430'W 19° 51.513'N, 68° 41.399'W	December through April, annually
Coastal waters of Gabon, Congo and Equatorial Guinea	An exclusion zone following the 500-m isobath extending from 3°31.055'N, 9°12.226'E in the north offshore of Malabo southward to 8°57.470'S, 12°55.873'E offshore of Luanda.	June through October, annually
Patagonian Shelf Break	Between 200- and 2000-m isobaths and the following latitudes: 35°00'S, 39°00'S, 40°40'S, 42°30'S, 46°00'S, 48°50'S.	Year-round
Southern Right Whale Seasonal Habitat	Coastal waters between 42°00'S and 43°00'S from 12 to 15 nmi including the enclosed bays of Golfo Nuevo, Golfo San Jose, and San Matias. Golfos San Jose and San Nuevo are within 22 km (14 mi; 12 nmi) coastal exclusion zone.	May through December, annually
Central California National Marine Sanctuaries	Single stratum boundary created from the Cordell Bank (15 CFR 922.10), Gulf of the Farallones (15 CFR 922.80), and Monterey Bay (15 CFR 922.30) NMS legal boundaries. Monterey Bay NMS includes the Davidson Seamount Management Zone.	June through November, annually
Antarctic Convergence Zone	30°E to 80°E, 45°S 80°E to 150°E, 55°S 150°E to 50°W, 60°S 50°W to 30°E, 50°S	October through March, annually

Name of Area	Location of Area	Months of Importance
Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk	54°09.436'N, 143°47.408'W 54°09.436'N, 143°17.354'W 54°01.161'N, 143°17.354'W 53°53.580'N, 143°13.398'W 53°26.963'N, 143°28.230'W 53°07.013'N, 143°35.481'W 52°48.705'N, 143°38.447'W 52°32.077'N, 143°37.788'W 52°21.605'N, 143°34.163'W 52°09.470'N, 143°26.582'W 51°57.686'N, 143°30.208'W 51°36.033'N, 143°42.794'W 51°08.082'N, 143°51.301'W 51°08.082'N, 144°16.742'W 51°24.514'N, 144°11.139'W 51°48.116'N, 144°10.809'W 52°03.194'N, 144°20.363'W 52°23.235'N, 144°10.150'W 52°28.674'N, 144°12.787'W 52°42.523'N, 144°10.150'W 53°12.972'N, 143°55.648'W 53°18.505'N, 143°56.637'W 53°23.041'N, 143°53.011'W 53°28.250'N, 143°53.341'W 53°44.039'N, 143°49.056'W 53°53.207'N, 143°50.045'W 53°59.819'N, 143°48.067'W	June through November, annually
Coastal waters off Madagascar	16°03'55.04"S, 50°27'12.59"E 16°12'23.03"S, 51°03'37.38"E 24°30'45.06"S, 48°26'00.94"E 24°15'28.07"S, 47°46'51.16"E 22°18'00.74"S, 48°14'13.52"E 20°52'24.12"S, 48°43'13.49"E 19°22'33.24"S, 49°15'45.47"E 18°29'46.08"S, 49°37'32.25"E 17°38'27.89"S, 49°44'27.17"E 17°24'39.12"S, 49°39'17.03"E 17°19'35.34"S, 49°54'23.82"E 16°45'41.71"S, 50°15'56.35"E	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
Madagascar Plateau, Madagascar Ridge, and Walters Shoal	25°55'20.00"S, 44°05'15.45"E 25°46'31.36"S, 47°22'35.90"E 27°02'37.71"S, 48°03'31.08"E 35°13'51.37"S, 46°26'19.98"E 35°14'28.59"S, 42°35'49.20"E 31°36'57.96"S, 42°37'49.35"E 27°41'11.21"S, 44°30'11.01"E	November through December, annually

Name of Area	Location of Area	Months of Importance
Ligurian-Corsican-Provençal Basin and Western Pelagos Sanctuary in the Mediterranean Sea	42°50.271'N, 06°31.883'E 42°55.603'N, 06°43.418'E 43°04.374'N, 06°52.165'E 43°12.600'N, 07°10.440'E 43°21.720'N, 07°19.380'E 43°30.600'N, 07°32.220'E 43°33.900'N, 07°49.920'E 43°36.420'N, 08°05.580'E 43°42.600'N, 08°22.140'E 43°50.880'N, 08°34.500'E 43°58.560'N, 08°47.700'E 43°59.040'N, 08°56.040'E 43°57.047'N, 09°03.540'E 43°52.260'N, 09°08.520'E 43°47.580'N, 09°13.500'E 43°36.060'N, 09°16.620'E 43°28.440'N, 09°05.820'E 43°21.360'N, 09°02.100'E 43°16.020'N, 08°57.240'E 43°04.440'N, 08°47.580'E 42°54.900'N, 08°35.400'E 42°45.900'N, 08°27.540'E 42°36.060'N, 08°22.020'E 42°22.620'N, 08°15.849'E 42°07.202'N, 08°17.174'E 41°52.800'N, 08°15.720'E 41°39.780'N, 08°05.280'E 41°28.200'N, 08°51.600'E 42°57.060'N, 06°19.860'E	July to August, annually
Hawaiian Islands Humpback Whale NMS and Penguin Bank	21°10'02.179"N, 157°30'58.217"W 21°09'46.815"N, 157°30'22.367"W 21°06'39.882"N, 157°31'00.778"W 21°02'51.976"N, 157°30'30.049"W 20°59'52.725"N, 157°29'28.591"W 20°58'05.174"N, 157°27'35.919"W 20°55'49.456"N, 157°30'58.217"W 20°50'44.729"N, 157°42'42.418"W 20°51'02.654"N, 157°44'45.333"W 20°53'56.784"N, 157°46'04.716"W 20°56'32.988"N, 157°45'33.987"W 21°01'27.472"N, 157°43'10.586"W 21°05'20.499"N, 157°39'27.802"W 21°10'02.179"N, 157°30'58.217"W	November through April, annually
Costa Rica Dome	Centered at 9°N and 88°W	Year-round

Name of Area	Location of Area	Months of Importance
Great Barrier Reef Between 16° S and 21° S	16°01.829'S, 145°38.783'E 15°52.215'S, 146°20.936'E 17°28.354'S, 146°59.392'E 20°16.228'S, 151°39.674'E 20°58.381'S, 150°30.897'E 20°17.007'S, 149°38.247'E 20°10.941'S, 149°18.247'E 20°02.403'S, 149°12.623'E 19°53.287'S, 149°03.986'E 19°49.866'S, 148°52.135'E 19°53.287'S, 148°44.302'E 19°47.965'S, 148°36.870'E 19°47.205'S, 148°26.024'E 19°19.978'S, 147°39.626'E 19°14.065'S, 147°37.014'E 19°08.913'S, 147°31.993'E 19°05.667'S, 147°24.160'E 19°07.576'S, 147°18.134'E 18°51.718'S, 146°51.219'E 18°44.258'S, 146°54.031'E 18°37.175'S, 146°51.420'E 18°31.620'S, 146°43.385'E 18°27.595'S, 146°40.573'E 17°36.676'S, 146°20.488'E 17°20.484'S, 146°16.671'E 17°07.745'S, 146°13.056'E 16°49.769'S, 146°11.047'E 16°41.835'S, 146°03.817'E 16°39.706'S, 145°54.979'E	May through September, annually
Bonney Upwelling on the west coast of Australia	37°12'20.036"S, 139°31'17.703"E 37°37'33.815"S, 139°42'42.508"E 38°10'36.144"S, 140°22'57.345"E 38°44'50.558"S, 141°33'50.342"E 39°07'04.125"S, 141°11'00.733"E 37°28'33.179"S, 139°10'52.263"E	December through May, annually
Northern Bay of Bengal and Head of Swatch-of-No-Ground	20°59.735'N, 89°07.675'E 20°55.494'N, 89°09.484'E 20°52.883'N, 89°12.704'E 20°55.275'N, 89°18.133'E 21°04.558'N, 89°25.294'E 21°12.655'N, 89°25.354'E 21°13.279'N, 89°16.833'E 21°06.347'N, 89°15.011'E	Year-round
Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon	Boundaries within 23 nmi (26.5 m; 42.6 km) of the coast from 47°07' N to 48°30' N latitude 48°30'01.995"N, 125°58'38.786"W 48°16'55.605"N, 125°38'52.052"W 48°23'07.353"N, 125°17'10.935"W 48°12'38.241"N, 125°16'42.339"W 47°58'20.361"N, 125°31'14.517"W 47°58'20.361"N, 126°06'16.322"W 48°09'46.665"N, 126°25'48.758"W	Olympic NMS: December, January, March, and May, annually The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually

Name of Area	Location of Area	Months of Importance
Abrolhos Bank	16°35'34.909"38°52'30.455" 16°35'31.619"38°43'41.069" 16°40'00.131"37°23'52.492" 19°30'59.069"37°23'52.446" 19°30'59.974"39°33'38.351" 19°20'24.752"39°30'33.03" 18°52'16.884"39°32'31.789" 18°45'09.937"39°32'27.709" 18°30'59.345"39°30'59.669" 18°27'28.985"39°30'13.453" 18°17'30.429"39°26'21.073" 18°07'43.518"39°19'52.924" 18°09'24.931"39°16'24.913" 18°10'04.585"39°12'30.425" 18°10'20.682"38°39'06.185" 18°08'50.404"38°35'00.059" 18°06'05.466"38°31'41.385" 18°02'09.399"38°29'26.179" 17°58'01.372"38°28'45.409" 17°53'58.883"38°29'34.612" 16°48'58.768"38°55'23.768" 16°43'15.682"38°53'40.007"	August through November, annually

Attachment 2 – Authorized Take Estimates by Operating Region

The Holder of this Authorization must maintain a running calculation/estimation of takes of each species over the effective period of these regulations. The Holder of this Authorization must also coordinate with the Holder of the Letter of Authorization issued to the USNS EFFECTIVE, the USNS VICTORIOUS, and the USNS IMPECCABLE, to ensure that these conditions are met for all vessels combined.

Category	Requested Take Authorization Level A harassment
Mysticetes	No more than 6 over the course of the regulations.
Odontocetes	No more than 25 over the course of the regulations.
Pinnipeds	No more than 25 over the course of the regulations.

East of Japan—Operational Area 1	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Blue whale	2
Fin whale	2
Sei whale	7
Bryde's whale	7
Minke whale	16
North Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Baird's beaked whale	21
Cuvier's beaked whale	37
Ginkgo-toothed beaked whale	5
Hubbs' beaked whale	5
False killer whale	32
Pygmy killer whale	19
Short-finned pilot whale	118
Risso's dolphin	92
Common dolphin	658
Bottlenose dolphin	136
Spinner dolphin	0
Pantropical spotted Dolphin	88
Striped dolphin	57
Rough-toothed dolphin	44
Fraser's dolphin	45
Pacific white-sided dolphin	94

North Philippine Sea—Operational Area 2

3 Missions

Animal	Requested Take Authorization Level B harassment
Bryde's whale	21
Minke whale	304
North Pacific right whale	1
Sperm whale	143
<i>Kogia</i> spp.	281
Cuvier's beaked whale	146
Blainville's beaked whale	14
Ginkgo-toothed beaked whale	14
Killer whale	14
False killer whale	107
Pygmy killer whale	76
Melon-headed whale	45
Short-finned pilot whale	826
Risso's dolphin	833
Common dolphin	1644
Bottlenose dolphin	271
Spinner dolphin	0
Pantropical spotted dolphin	570
Striped dolphin	1369
Rough-toothed dolphin	481
Fraser's dolphin	265
Pacific white-sided dolphin	466

West Philippine Sea—Operational Area 3 3 Missions	
Animal	Requested Take Authorization Level B harassment
Fin whale	14
Bryde's whale	42
Minke whale	141
Humpback whale (winter only)	2
Sperm whale	31
<i>Kogia</i> spp.	106
Cuvier's beaked whale	10
Blainville's beaked whale	20
Ginkgo-toothed beaked whale	19
False killer whale	131
Pygmy killer whale	94
Melon-headed whale	56
Short-finned pilot whale	215
Risso's dolphin	575
Common dolphin	3287
Bottlenose dolphin	473
Spinner dolphin	0
Pantropical spotted dolphin	307
Striped dolphin	343
Rough-toothed dolphin	336
Fraser's dolphin	20
Pacific white-sided dolphin	559

Offshore Guam—Operational Area 4

3 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	3
Fin whale	11
Sei whale	9
Bryde's whale	13
Minke whale	8
Humpback whale (winter only)	580
Sperm whale	31
<i>Kogia</i> spp.	386
Cuvier's beaked whale	191
Blainville's beaked whale	36
Ginkgo-toothed beaked whale	16
Longman's beaked whale	13
False killer whale	36
Pygmy killer whale	4
Melon-headed whale	137
Killer whale	6
Short-finned pilot whale	54
Risso's dolphin	34
Common dolphin	0
Bottlenose dolphin	0
Spinner dolphin	102
Pantropical spotted dolphin	570
Striped dolphin	172
Rough-toothed dolphin	15
Fraser's dolphin	127

Sea of Japan—Operational Area 5	
2 Missions	
Animal	Requested Take Authorization Level B harassment
Fin whale	44
Bryde's whale	5
Minke whale	16
Minke whale J stock	6
Gray whale	0
N. Pacific right whale	1
Sperm whale	41
Stejneger's beaked whale	80
Baird's beaked whale	18
Cuvier's beaked whale	245
Ginkgo-toothed beaked whale	30
False killer whale	161
Melon-headed whale	0
Short-finned pilot whale	33
Risso's dolphin	350
Common dolphin	3615
Bottlenose dolphin	32
Spinner dolphin	0
Pantropical spotted dolphin	285
Pacific white-sided dolphin	94
Dall's porpoise	1412

East China Sea—Operational Area 6

1 Mission

Animal	Requested Take Authorization Level B harassment
Fin whale	4
Bryde's whale	9
Minke whale	58
Minke whale J stock	24
Gray whale (winter only)	1
N. Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Cuvier's beaked whale	64
Blainville's beaked whale	13
Ginkgo-toothed beaked whale	5
False killer whale	17
Pygmy killer whale	4
Melon-headed whale	63
Short-finned pilot whale	27
Risso's dolphin	150
Common dolphin	658
Bottlenose dolphin	106
Spinner dolphin	0
Pantropical spotted dolphin	154
Striped dolphin	172
Rough-toothed dolphin	73
Fraser's dolphin	67
Pacific white-sided dolphin	0

South China Sea—Operational Area 7	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Fin whale	4
Bryde's whale	9
Minke whale	43
Gray whale (winter only)	1
North Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Cuvier's beaked whale	0
Blainville's beaked whale	7
Ginkgo-toothed beaked whale	7
False killer whale	19
Pygmy killer whale	4
Melon-headed whale	70
Short-finned pilot whale	22
Risso's dolphin	175
Common dolphin	658
Bottlenose dolphin	85
Spinner dolphin	3249
Pantropical spotted dolphin	132
Striped dolphin	172
Rough-toothed dolphin	73
Fraser's dolphin	67

Offshore Japan 25-40° N—Operational Area 8

1 Mission

Animal	Requested Take Authorization Level B harassment
Blue whale	11
Fin whale	5
Sei whale	15
Bryde's whale	21
Minke whale	13
Sperm whale	11
<i>Kogia</i> spp.	211
Baird's beaked whale	3
Cuvier's beaked whale	37
<i>Mesoplodon</i> spp.	16
False killer whale	117
Pygmy killer whale	7
Melon-headed whale	41
Short-finned pilot whale	0
Risso's dolphin	34
Common dolphin	3615
Bottlenose dolphin	17
Spinner dolphin	0
Pantropical spotted dolphin	307
Striped dolphin	856
Rough-toothed dolphin	15
Pacific white-sided dolphin	102
Hawaiian monk seal	1

Offshore Japan 10-25° N—Operational Area 9

1 Mission

Animal	Requested Take Authorization Level B harassment
Bryde's whale	9
Sperm whale	0
<i>Kogia</i> spp.	0
Cuvier's beaked whale	19
False killer whale	34
Melon-headed whale	19
Short-finned pilot whale	22
Risso's dolphin	42
Common dolphin	1,644
Bottlenose dolphin	17
Spinner dolphin	102
Pantropical spotted dolphin	395
Striped dolphin	172
Rough-toothed dolphin	0

Hawaii North—Operational Area 10	
2 Missions	
Animal	Requested Take Authorization Level B harassment
Blue whale	8
Fin whale	6
Bryde's whale	12
Minke whale	8
Humpback whale	91
Sperm whale	73
<i>Kogia</i> spp.	506
Cuvier's beaked whale	205
Blainville's beaked whale	39
Longman's beaked whale	14
Killer whale	6
False killer whale (Hawaii Pelagic)	9
False killer whale (Hawaii Insular)	9
Pygmy killer whale	17
Melon-headed whale	51
Short-finned pilot whale	66
Risso's dolphin	44
Bottlenose dolphin (Hawaii Pelagic)	193
Bottlenose dolphin (Kauai/Niihau)	1
Spinner dolphin	16
Pantropical spotted dolphin	43
Striped dolphin	62
Rough-toothed dolphin	164
Fraser's dolphin	156
Hawaiian monk seal	4

Hawaii South—Operational Area 11
2 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	4
Fin whale	3
Bryde's whale	6
Minke whale	6
Humpback whale	0
Sperm whale	48
<i>Kogia</i> spp.	257
Cuvier's beaked whale	122
Blainville's beaked whale	23
Longman's beaked whale	8
Killer whale	3
False killer whale (Hawaii Pelagic)	5
False killer whale (Hawaii Insular)	5
Pygmy killer whale	9
Melon-headed whale	27
Short-finned pilot whale	63
Risso's dolphin	23
Bottlenose dolphin (Hawaii Pelagic)	25
Bottlenose dolphin (Oahu)	1
Bottlenose dolphin (4-Island)	1
Bottlenose dolphin	3
Spinner dolphin	20
Pantropical spotted dolphin	53
Striped dolphin	78
Rough-toothed dolphin	87
Fraser's dolphin	83
Hawaiian monk seal	3



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

LETTER OF AUTHORIZATION

The Chief of Naval Operations, Department of the Navy, 2000 Navy Pentagon, Washington, D.C. 20350-2000, and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to Navy operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar in accordance with 50 CFR Part 218, Subpart X—Taking of Marine Mammals Incidental to Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar subject to the provisions of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*; MMPA) and the following conditions:

1. This Authorization is valid for the period August 15, 2012, through August 14, 2013.
2. This Authorization is valid only for the unintentional taking of the species of marine mammals identified in 50 CFR § 218.230(b) and Condition 5 of this Authorization governing the taking of these animals incidental to the activity specified in Condition 3. This authorization shall be valid only for take consistent with the provisions in 50 CFR § 218.232 and the terms of this Authorization as specified in this Authorization.
3. This Authorization is valid only for activities associated with the operation of the SURTASS LFA Sonar onboard the United States Naval Ship (USNS) EFFECTIVE (T-AGOS 21). The signals transmitted by the SURTASS LFA sonar source must be between 100 and 500 Hertz (Hz) with a source level for each of the 18 projectors at no more than 215 decibels (dB) re: 1 micro Pascal (μPa) at 1 meter (m) root mean square (rms)) with a maximum duty cycle of 20 percent.
4. This Authorization, combined with Authorizations for the USNS VICTORIOUS (T-AGOS 19), USNS ABLE (T-AGOS 20), and USNS IMPECCABLE (T-AGOS 23), is valid for an estimated total of 20 nominal active sonar missions among the four SURTASS LFA sonar vessels (or equivalent shorter missions but not to exceed a total of 432 hours of transmit time per vessel during the period of effectiveness of this Authorization) within the following areas:
 - (a) Up to 16 nominal missions in the northwestern Pacific Ocean which includes the following operational areas: east of Japan; the North Philippine Sea; the west Philippine Sea; offshore Guam; the Sea of Japan; the East China Sea; the South China Sea; and offshore Japan (25° to 40° N and 10° to 25° N).

USNS EFFECTIVE



- (b) Up to 4 nominal missions in the Hawaii Range Complex which includes the northern and southern Hawaii operational areas.

SPECIES AUTHORIZED AND LEVEL OF TAKE

5. The incidental take of marine mammals under the activity identified in Conditions 3 and 4 of this Authorization is limited to the following species:
- (a) **Mysticetes:** blue whale (*Balaenoptera musculus*), Bryde's whale (*Balaenoptera edeni*), fin whale (*Balaenoptera physalus*), gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*), minke whale (*Balaenoptera acutorostrata*), northern Pacific right whale (*Eubalena japonica*), pygmy right whale (*Capera marginata*), sei whale (*Balaenoptera borealis*), and southern right whale (*Eubalaena australis*).
 - (b) **Odontocetes:** Baird's beaked whale (*Berardius bairdii*), Blainville's beaked whale (*Mesoplodon densirostris*), common bottlenose dolphin (*Tursiops truncatus*), Cuvier's beaked whale (*Ziphius cavirostris*), Dall's porpoise (*Phocoenoides dalli*), dwarf sperm and pygmy sperm whales (*Kogia simus* and *K. breviceps*), false killer whale (includes Hawaii pelagic and insular stocks) (*Pseudorca crassidens*), Fraser's dolphin (*Lagenodelphis hosei*), Gervais' beaked whale (*Mesoplodon europaeus*), ginkgo-toothed beaked whale (*Mesoplodon ginkgodens*), Gray's beaked whale (*Mesoplodon grayi*), Hector's beaked whale (*Mesoplodon hectori*), Hubbs' beaked whale (*Mesoplodon carhubbsi*), Indo-Pacific bottlenose dolphin (*Tursiops aduncus*), killer whale (*Orca orcinus*), long-beaked common dolphin (*Delphinus capensis*), Longman's beaked whale (*Indopacetus pacificus*), melon-headed whale (*Peponocephala electra*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), pantropical spotted dolphin (*Stenella attenuata*), Perrin's beaked whale (*Mesoplodon perrini*), pygmy beaked whale (*Mesoplodon peruvianus*), pygmy killer whale (*Feresa attenuata*), Risso's dolphin (*Grampus griseus*), rough-toothed dolphin (*Steno bredanensis*), short-beaked common dolphin (*Delphinus delphis*), short-finned pilot whale (*Globicephala macrorhynchus*), Sowerby's beaked whale (*Mesoplodon bidens*), spade-toothed beaked whale (*Mesoplodon traversii*), sperm whale (*Physeter macrocephalus*), spinner dolphin (*Stenella longirostris*), Stejneger's beaked whale (*Mesoplodon stejnegeri*), strap-toothed beaked whale (*Mesoplodon layardii*), striped dolphin (*Stenella coeruleoalba*), and True's beaked whale (*Mesoplodon mirus*).
 - (c) **Pinnipeds:** Hawaiian monk seal (*Monachus schauinslandi*)
6. The taking of marine mammals by the Holder of this Authorization is limited to the incidental taking of marine mammal species identified in Condition 5 by Level A and Level B harassment (as defined in the MMPA and 50 CFR § 216.3) within those areas authorized under Condition 4. The take, by harassment, that occurs during the year covered by this Authorization may not exceed the amount identified in Attachment 2.
7. Taking of marine mammal species not listed under Condition 5 by harassment, injury, or mortality, or the taking by mortality of any marine mammal species listed under Condition 5 is prohibited.

MITIGATION

8. The Holder of this Authorization, and any individuals operating under his authority, must conduct the activity identified in 50 CFR § 218.230 and Condition 3 of this Authorization in a manner that minimizes, to the greatest extent practicable, adverse impacts on marine mammals, their habitats, and the availability of marine mammals for subsistence. When conducting operations identified in 50 CFR § 218.230, the following mitigation measures must be implemented:
 - (a) The Holder of this Authorization, and any individuals operating under his authority, must not broadcast the SURTASS LFA sonar signal at a frequency greater than 500 Hz.
 - (b) Through mitigation described under 50 CFR § 218.234 and Condition 9 (Mitigation Monitoring) of this Authorization, the Holder of this Authorization and any individuals operating under his authority must ensure, to the greatest extent practicable, that no marine mammal is subjected to a sound pressure level of 180 dB re: 1 μ Pa (rms) or greater.
 - (c) **LFA Sonar Mitigation Zone:** Prior to commencing and during SURTASS LFA sonar transmissions, the Holder of this Authorization will use near-real-time environmental data and underwater acoustic prediction models to determine the propagation of the SURTASS LFA sonar signals in the operating area. The Holder must determine the distance from the SURTASS LFA sonar source to the 180-dB re: 1 μ Pa isopleth (rms) (i.e., the LFA sonar mitigation zone) in order to comply with Condition 8(b).
 - (i) The Holder will update these sound field estimates every 12 hours, or more frequently when meteorological or oceanographic conditions change.
 - (d) **Additional 1-km Buffer Zone:** The Holder of this Authorization will establish a one-kilometer (1-km) buffer zone around the LFA sonar mitigation zone.
 - (e) **Ramp-Up Procedures for the HF/M3 System:** The Holder of a Letter of Authorization will ramp up the High Frequency / Marine Mammal Monitoring (HF/M3) active sonar referenced in 50 CFR § 218.234 from a power level beginning at a maximum source sound pressure level of 180 dB re: 1 μ Pa (rms) in 10-dB increments to operating levels over a period of no less than five minutes:
 - (i) At least 30 minutes prior to any SURTASS LFA sonar transmission;
 - (ii) Prior to any SURTASS LFA sonar calibrations or testing that are not part of regular SURTASS LFA sonar transmissions described in 50 CFR § 218.230; and
 - (iii) Anytime after the Holder of this Authorization has powered-down the HF/M3 active sonar source for more than two minutes.
 - (iv) The Holder of a Letter of Authorization will not increase the HF/M3 active sonar system's sound pressure level once they detect a marine mammal. The Holder may resume a ramp-up of the HF/M3 sonar system once marine mammals are no longer detected by the HF/M3 active sonar system, passive acoustic monitoring, or visual monitoring described in Condition 9.

- (f) **Suspension/Delay for SURTASS LFA Sonar Transmissions:** If the Holder of this Authorization detects a marine mammal through monitoring required under 50 CFR § 218.235 and Condition 9 within either the LFA sonar mitigation zone or the 1-km buffer zone around the surveillance vessel, the Holder will immediately suspend or delay SURTASS LFA transmissions.
- (g) **Resumption of SURTASS LFA Sonar Transmissions:** The Holder of this Authorization may resume/commence SURTASS LFA sonar transmissions 15 minutes after:
- (i) All marine mammals have left the LFA sonar mitigation zone and the 1-km buffer zone around the surveillance vessel; and
 - (ii) There is no further detection of any marine mammal within the LFA sonar mitigation zone plus the 1-km buffer zone as determined by the visual, passive or active acoustic monitoring protocols described in 50 CFR § 218.235 and Condition 9.
- (h) **Geographic Restrictions:** The Holder of this Authorization will not operate SURTASS LFA sonar such that the SURTASS LFA sonar sound field exceeds 180 dB re: 1 μ Pa (rms):
- (i) At a distance of less than or equal to 22 km (14 miles (mi); 22 nautical miles (nm)) from any coastline, including offshore islands.
 - (ii) At a distance of less than or equal to 1 km (0.62 mi; 0.54 nm) seaward of the outer perimeter of any offshore biologically important area for marine mammals designated in 50 CFR § 218.234(f)(2) and described in Condition 8(h)(iii) during the period specified.
 - (iii) The Offshore Biologically Important Areas (OBIA) for marine mammals (with specified periods) for SURTASS LFA sonar operations are:

OBIA	Period of Effectiveness
Georges Bank	Year-round
Roseway Basin Right Whale Conservation Area	June through December, annually
Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS)	January 1 to November 14, annually
Southeastern U.S. Right Whale Seasonal Habitat	November 15 to April 15, annually
North Pacific Right Whale Critical Habitat	March through August, annually
Silver Bank and Navidad Bank	December through April, annually
Coastal waters of Gabon, Congo and Equatorial Guinea	June through October, annually
Patagonian Shelf Break	Year-round
Southern Right Whale Seasonal Habitat	May through December, annually
Central California NMSs	June through November, annually
Antarctic Convergence Zone	October through March, annually

Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk	June through November, annually
Coastal waters off Madagascar	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
Madagascar Plateau, Madagascar Ridge, and Walters Shoal	November through December, annually
Ligurian-Corsican-Provencal Basin and Western Pelagos Sanctuary in the Mediterranean Sea	July to August, annually
Hawaiian Islands Humpback Whale NMS and Penguin Bank	November through April, annually
Costa Rica Dome	Year-round
Great Barrier Reef Between 16° S and 21° S	May through September, annually
Bonney Upwelling on the southern coast of Australia	December through May, annually
Northern Bay of Bengal and Head of Swatch-of-No-Ground	Year-round
Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon	Olympic NMS: December, January, March, and May, annually The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually
Abrolhos Bank	August through November

Note: See § 218.234(f)(2) and Attachment 1 for coordinate information.

- (i) **Operational Exception for SURTASS LFA Sound Field in OBIA's:** During military operations, SURTASS LFA sonar transmissions may exceed 180 dB re: 1 μ Pa (rms) within the boundaries of an OBIA, including operating within an OBIA, when the Holder of this Authorization determines that it is: 1) operationally necessary to continue tracking an existing underwater contact; or 2) operationally necessary to detect a new underwater contact within the OBIA. This exception does not apply to routine training and testing with the SURTASS LFA sonar systems.
- (j) **Mission Planning:** The Holder of this Authorization must maintain a running calculation/estimation of takes of each species over the effective period of these regulations. The Holder of this Authorization will plan all SURTASS LFA sonar missions to ensure that no more than 12 percent of any marine mammal stock listed in 50 CFR § 218.230(b)(1) through (3) would be taken by Level B harassment annually. This annual per-stock cap of 12 percent applies regardless of the number of LFA sonar vessels operating. The Holder of this Authorization must coordinate with the Holder of the Letters of Authorization issued to the USNS VICTORIOUS, USNS ABLE, and the USNS IMPECCABLE, to ensure that this condition is met for all vessels combined.

MITIGATION MONITORING

9. The Holder of this Authorization, and any individuals operating under his authority, must:
 - (a) Perform the following for visual mitigation monitoring:
 - (i) Marine mammal biologists qualified in conducting at-sea marine mammal visual monitoring from surface vessels will train and qualify designated ship personnel as lookouts to conduct at-sea visual monitoring.
 - (ii) Train the lookouts in the most effective means to ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if they spot marine mammals.
 - (iii) Conduct visual monitoring from the ship's bridge during daylight hours (30 minutes before sunrise until 30 minutes after sunset) during operations that employ SURTASS LFA sonar in the active mode. Maintain a topside watch with standard binoculars (7x) and with the naked eye.
 - (b) Perform the following for passive acoustic monitoring:
 - (i) Use the low frequency, passive SURTASS sonar system to listen for vocalizing marine mammals; and
 - (c) Perform the following for active acoustic monitoring:
 - (i) Use the HF/M3 active sonar to locate and track marine mammals in relation to the SURTASS LFA sonar vessel and the sound field produced by the SURTASS LFA sonar source array, subject to the ramp-up requirements in § 218.234(e) and Condition 8(e).
10. Mitigation monitoring under Conditions 9(a), (b), and (c) must:
 - (a) Commence at least 30 minutes before the first SURTASS LFA sonar transmission (30 minutes before sunrise for visual monitoring);
 - (b) Continue between transmission pings; and
 - (c) Continue for at least 15 minutes after completion of the SURTASS LFA sonar transmission exercise (30 minutes after sunset for visual monitoring), or if marine mammals are showing abnormal behavioral patterns, for a period of time until behavior patterns return to normal or conditions prevent continued observations.

MONITORING

11. The Holder of this Authorization for activities described in 50 CFR § 218.230 must:
 - (a) Cooperate with the NMFS and any other federal agency for monitoring the impacts of the activity on marine mammals; and
 - (b) Designate qualified on-site individuals to conduct the mitigation, monitoring and reporting activities specified in this Letter of Authorization.

12. The Holder of this Authorization will conduct all monitoring required under the Letter of Authorization to increase knowledge of the affected marine mammal species. The Holder of this Authorization must:
- (a) Convene a Scientific Advisory Group (SAG) to analyze different types of monitoring/research that could increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises.
 - (b) Continue to assess data from the Marine Mammal Monitoring Program and work toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances. Any portions of the analyses conducted by these scientists based on these data that are determined to be unclassified after appropriate security reviews will be made publically available.
 - (c) Continue to explore the feasibility of coordinating with other fleet assets and/or range monitoring programs to include the use of SURTASS LFA sonar towed horizontal line arrays to augment the collection of marine mammal vocalizations before, during, and after designated exercises.
 - (d) Continue to collect ambient noise data and explore the feasibility of declassifying and archiving the ambient noise data for incorporation into appropriate ocean noise budget efforts.

REPORTING

13. The Holder of this Authorization must:
- (a) Provide a status update to the NMFS when the Holder submits the next annual application on efforts to assess the data collected by its undersea arrays and progress toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances.
 - (b) Draft a plan of action outlining a strategy for implementing the Scientific Advisory Group's (SAG) recommendations for going forward with beaked whale and/or harbor porpoise research; or describe in writing why such research is not feasible/or is unlikely to increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises, to be followed by a meeting with NMFS to discuss any other potential options.
 - (c) Systematically observe SURTASS LFA sonar operations for injured or disabled marine mammals and monitor the principal marine mammal stranding networks and other media to correlate analysis of any whale strandings that could potentially be associated with SURTASS LFA sonar operations.
 - (i) The Holder will ensure that the NMFS is notified immediately or as soon as clearance procedures allow if an injured, stranded, or dead marine mammal is found during or shortly after, and in the vicinity of, any SURTASS LFA operations. The Holder will report the incident to the Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Jeannine.Cody@noaa.gov.

- (ii) The Holder will provide the NMFS with species or description of the animal(s), the condition of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available).
 - (iii) In the event that an injured, stranded, or dead marine mammal is found by the Holder that is not in the vicinity of, or found during or shortly after SURTASS LFA sonar operations, the Holder will report the same information to NMFS as listed above as soon as operationally feasible and clearance procedures allow.
- (d) In the event of a ship strike by the SURTASS LFA sonar vessel, at any time or place, the Holder must:
- (i) Immediately, or as soon as clearance procedures allow, report to the NMFS the species identification (if known), location (lat/long) of the animal (or the strike if the animal has disappeared), and whether the animal is alive or dead (or unknown);
 - (ii) Report the incident to the Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Jeannine.Cody@noaa.gov;
 - (iii) Report to the NMFS as soon as operationally feasible the size and length of the animal, an estimate of the injury status (e.g., dead, injured but alive, injured and moving, unknown, etc.), vessel class/type and operational status;
 - (iv) Report to the NMFS the vessel length, speed, and heading as soon as feasible; and
 - (v) Provide the NMFS a photo or video, if equipment is available.
- (e) Submit classified and unclassified quarterly mission reports to the Director, Office of Protected Resources, NMFS, no later than 30 days after the end of each quarter beginning on the date of effectiveness of a Letter of Authorization or as specified in the appropriate Letter of Authorization. Each quarterly mission report will include all active-mode missions completed during that quarter. At a minimum, each classified mission report must contain the following information:
- (i) Dates, times, and location of each vessel during each mission;
 - (ii) Information on sonar transmissions during each mission and records of any delays or suspensions;
 - (iii) Location of the SURTASS LFA sonar mitigation and buffer zones in relation to the LFA sonar array;
 - (iv) Marine mammal observations including animal type and/or species, number of animals sighted, date and time of observations, type of detection (visual, passive acoustic, HF/M3 sonar), bearing and range from vessel, abnormal behavior (if any), and remarks/narrative (as necessary).
 - (v) The report will include the Navy's estimates of the percentages of marine mammal stocks affected (both for the quarter and cumulatively for the year

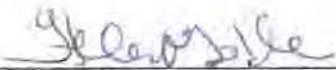
covered by the Authorization) by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on operating locations, dates/times of operations, system characteristics, oceanographic environmental conditions, and animal demographics.

- (vi) In the event that no SURTASS LFA sonar missions are completed during a quarter, a report of negative activity will be provided.
- (f) Submit an annual, unclassified report to the Director, Office of Protected Resources, NMFS, no later than 45 days after expiration of this Authorization. At a minimum, the annual report will contain the following:
- (i) An unclassified summary of the year's quarterly reports;
 - (ii) The Navy's estimates of the percentages of marine mammal stocks affected by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on operating locations, dates/times of operations, system characteristics, oceanographic environmental conditions, and animal demographics.
 - (iii) An analysis of the effectiveness of the mitigation measures with recommendations for improvements where applicable;
 - (iv) An assessment of any long-term effects from SURTASS LFA sonar operations; and
 - (v) Any discernible or estimated cumulative impacts from SURTASS LFA sonar operations.

14. The Holder of this Authorization must comply with the Terms and Conditions of the Incidental Take Statement corresponding to the Endangered Species Act Biological Opinion issued to the Navy and the National Marine Fisheries Service's Office of Protected Resources, Permits and Conservation Division.

15. A copy of this Authorization must be in the possession of the Officer in Charge of the Military Detachment (MILDET) on board the USNS EFFECTIVE in order to conduct the activity under the authority of this Letter of Authorization and Incidental Take Statement.

AUG 15 2012



Helen M. Golde, Acting Director
Office of Protected Resources
National Marine Fisheries Service

Date

Attachment 1 – Table 1 OBIA Coordinates

Name of Area	Location of Area	Months of Importance
Georges Bank	40°00'N, 72°30'W 39°37'N, 72°09'W 39°54'N, 71°43'W 40°02'N, 71°20'W 40°08'N, 71°01'W 40°04'N, 70°44'W 40°00'N, 69°24'W 40°16'N, 68°27'W 40°34'N, 67°13'W 41°00'N, 66°24'W 41°52'N, 65°47'W 42°20'N, 66°06'W 42°18'N, 67°23'W	Year-round
Roseway Basin Right Whale Conservation Area	43°05'N, 65°40'W 43°05'N, 65°03'W 42°45'N, 65°40'W 42°45'N, 65°03'W	June through December, annually
Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS)	41°00.000'N, 69°05.000'W 42°09.000'N, 67°08.400'W 42°53.436'N, 67°43.873'W 44°12.541'N, 67°16.847'W 44°14.911'N, 67°08.936'W 44°21.538'N, 67°03.663'W 44°26.736'N, 67°09.596'W 44°16.805'N, 67°27.394'W 44°11.118'N, 67°56.398'W 43°59.240'N, 68°08.263'W 43°36.800'N, 68°46.496'W 43°33.925'N, 69°19.455'W 43°32.008'N, 69°44.504'W 43°21.922'N, 70°06.257'W 43°04.084'N, 70°21.418'W 42°51.982'N, 70°31.965'W 42°45.187'N, 70°23.396'W 42°39.068'N, 70°30.188'W 42°32.892'N, 70°35.873'W 42°07.748'N, 70°28.257'W 42°05.592'N, 70°02.136'W 42°03.664'N, 69°44.000'W 41°40.000'N, 69°45.000'W	January 1 to November 14, annually
Southeastern U.S. Right Whale Seasonal Habitat	Critical Habitat Boundaries are coastal waters between 31°15' N and 30°15'N from the coast out 15 nautical miles (nmi); and the coastal waters between 30°15' N and 28°00'N from the coast out 5 nmi. (50 CFR §226.13(c)) OBIA Boundaries are coastal waters between 31°15'N and 30°15'N from 12 to 15 nmi.	November 15 to April 15, annually
North Pacific Right Whale Critical Habitat	57°03'N, 153°00'W 57°18'N, 151°30'W 57°00'N, 151°30'W 56°45'N, 153°00'W (50 CFR §226.215)	March through August, annually

Name of Area	Location of Area	Months of Importance
Silver Bank and Navidad Bank	Silver Bank: 20° 38.899'N, 69° 23.640'W 20° 55.706'N, 69° 57.984'W 20° 25.221'N, 70° 00.387'W 20° 12.833'N, 69° 40.604'W 20° 13.918'N, 69° 31.518'W 20° 28.680'N, 69° 31.900'W Navidad Bank: 20° 15.596'N, 68° 47.967'W 20° 11.971'N, 68° 54.810'W 19° 52.514'N, 69° 00.443'W 19° 54.957'N, 68° 51.430'W 19° 51.513'N, 68° 41.399'W	December through April, annually
Coastal waters of Gabon, Congo and Equatorial Guinea	An exclusion zone following the 500-m isobath extending from 3°31.055'N, 9°12.226'E in the north offshore of Malabo southward to 8°57.470'S, 12°55.873'E offshore of Luanda.	June through October, annually
Patagonian Shelf Break	Between 200- and 2000-m isobaths and the following latitudes: 35°00'S, 39°00'S, 40°40'S, 42°30'S, 46°00'S, 48°50'S.	Year-round
Southern Right Whale Seasonal Habitat	Coastal waters between 42°00'S and 43°00'S from 12 to 15 nmi including the enclosed bays of Golfo Nuevo, Golfo San Jose, and San Matias. Golfos San Jose and San Nuevo are within 22 km (14 mi; 12 nmi) coastal exclusion zone.	May through December, annually
Central California National Marine Sanctuaries	Single stratum boundary created from the Cordell Bank (15 CFR 922.10), Gulf of the Farallones (15 CFR 922.80), and Monterey Bay (15 CFR 922.30) NMS legal boundaries. Monterey Bay NMS includes the Davidson Seamount Management Zone.	June through November, annually
Antarctic Convergence Zone	30°E to 80°E, 45°S 80°E to 150°E, 55°S 150°E to 50°W, 60°S 50°W to 30°E, 50°S	October through March, annually

Name of Area	Location of Area	Months of Importance
Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk	54°09.436'N, 143°47.408'W 54°09.436'N, 143°17.354'W 54°01.161'N, 143°17.354'W 53°53.580'N, 143°13.398'W 53°26.963'N, 143°28.230'W 53°07.013'N, 143°35.481'W 52°48.705'N, 143°38.447'W 52°32.077'N, 143°37.788'W 52°21.605'N, 143°34.163'W 52°09.470'N, 143°26.582'W 51°57.686'N, 143°30.208'W 51°36.033'N, 143°42.794'W 51°08.082'N, 143°51.301'W 51°08.082'N, 144°16.742'W 51°24.514'N, 144°11.139'W 51°48.116'N, 144°10.809'W 52°03.194'N, 144°20.363'W 52°23.235'N, 144°10.150'W 52°28.674'N, 144°12.787'W 52°42.523'N, 144°10.150'W 53°12.972'N, 143°55.648'W 53°18.505'N, 143°56.637'W 53°23.041'N, 143°53.011'W 53°28.250'N, 143°53.341'W 53°44.039'N, 143°49.056'W 53°53.207'N, 143°50.045'W 53°59.819'N, 143°48.067'W	June through November, annually
Coastal waters off Madagascar	16°03'55.04"S, 50°27'12.59"E 16°12'23.03"S, 51°03'37.38"E 24°30'45.06"S, 48°26'00.94"E 24°15'28.07"S, 47°46'51.16"E 22°18'00.74"S, 48°14'13.52"E 20°52'24.12"S, 48°43'13.49"E 19°22'33.24"S, 49°15'45.47"E 18°29'46.08"S, 49°37'32.25"E 17°38'27.89"S, 49°44'27.17"E 17°24'39.12"S, 49°39'17.03"E 17°19'35.34"S, 49°54'23.82"E 16°45'41.71"S, 50°15'56.35"E	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
Madagascar Plateau, Madagascar Ridge, and Walters Shoal	25°55'20.00"S, 44°05'15.45"E 25°46'31.36"S, 47°22'35.90"E 27°02'37.71"S, 48°03'31.08"E 35°13'51.37"S, 46°26'19.98"E 35°14'28.59"S, 42°35'49.20"E 31°36'57.96"S, 42°37'49.35"E 27°41'11.21"S, 44°30'11.01"E	November through December, annually

Name of Area	Location of Area	Months of Importance
Ligurian-Corsican-Provencal Basin and Western Pelagos Sanctuary in the Mediterranean Sea	42°50.271'N, 06°31.883'E 42°55.603'N, 06°43.418'E 43°04.374'N, 06°52.165'E 43°12.600'N, 07°10.440'E 43°21.720'N, 07°19.380'E 43°30.600'N, 07°32.220'E 43°33.900'N, 07°49.920'E 43°36.420'N, 08°05.580'E 43°42.600'N, 08°22.140'E 43°50.880'N, 08°34.500'E 43°58.560'N, 08°47.700'E 43°59.040'N, 08°56.040'E 43°57.047'N, 09°03.540'E 43°52.260'N, 09°08.520'E 43°47.580'N, 09°13.500'E 43°36.060'N, 09°16.620'E 43°28.440'N, 09°05.820'E 43°21.360'N, 09°02.100'E 43°16.020'N, 08°57.240'E 43°04.440'N, 08°47.580'E 42°54.900'N, 08°35.400'E 42°45.900'N, 08°27.540'E 42°36.060'N, 08°22.020'E 42°22.620'N, 08°15.849'E 42°07.202'N, 08°17.174'E 41°52.800'N, 08°15.720'E 41°39.780'N, 08°05.280'E 41°28.200'N, 08°51.600'E 42°57.060'N, 06°19.860'E	July to August, annually
Hawaiian Islands Humpback Whale NMS and Penguin Bank	21°10'02.179"N, 157°30'58.217"W 21°09'46.815"N, 157°30'22.367"W 21°06'39.882"N, 157°31'00.778"W 21°02'51.976"N, 157°30'30.049"W 20°59'52.725"N, 157°29'28.591"W 20°58'05.174"N, 157°27'35.919"W 20°55'49.456"N, 157°30'58.217"W 20°50'44.729"N, 157°42'42.418"W 20°51'02.654"N, 157°44'45.333"W 20°53'56.784"N, 157°46'04.716"W 20°56'32.988"N, 157°45'33.987"W 21°01'27.472"N, 157°43'10.586"W 21°05'20.499"N, 157°39'27.802"W 21°10'02.179"N, 157°30'58.217"W	November through April, annually
Costa Rica Dome	Centered at 9°N and 88°W	Year-round

Name of Area	Location of Area	Months of Importance
Great Barrier Reef Between 16° S and 21° S	16°01.829'S, 145°38.783'E 15°52.215'S, 146°20.936'E 17°28.354'S, 146°59.392'E 20°16.228'S, 151°39.674'E 20°58.381'S, 150°30.897'E 20°17.007'S, 149°38.247'E 20°10.941'S, 149°18.247'E 20°02.403'S, 149°12.623'E 19°53.287'S, 149°03.986'E 19°49.866'S, 148°52.135'E 19°53.287'S, 148°44.302'E 19°47.965'S, 148°36.870'E 19°47.205'S, 148°26.024'E 19°19.978'S, 147°39.626'E 19°14.065'S, 147°37.014'E 19°08.913'S, 147°31.993'E 19°05.667'S, 147°24.160'E 19°07.576'S, 147°18.134'E 18°51.718'S, 146°51.219'E 18°44.258'S, 146°54.031'E 18°37.175'S, 146°51.420'E 18°31.620'S, 146°43.385'E 18°27.595'S, 146°40.573'E 17°36.676'S, 146°20.488'E 17°20.484'S, 146°16.671'E 17°07.745'S, 146°13.056'E 16°49.769'S, 146°11.047'E 16°41.835'S, 146°03.817'E 16°39.706'S, 145°54.979'E	May through September, annually
Bonney Upwelling on the west coast of Australia	37°12'20.036"S, 139°31'17.703"E 37°37'33.815"S, 139°42'42.508"E 38°10'36.144"S, 140°22'57.345"E 38°44'50.558"S, 141°33'50.342"E 39°07'04.125"S, 141°11'00.733"E 37°28'33.179"S, 139°10'52.263"E	December through May, annually
Northern Bay of Bengal and Head of Swatch-of-No-Ground	20°59.735'N, 89°07.675'E 20°55.494'N, 89°09.484'E 20°52.883'N, 89°12.704'E 20°55.275'N, 89°18.133'E 21°04.558'N, 89°25.294'E 21°12.655'N, 89°25.354'E 21°13.279'N, 89°16.833'E 21°06.347'N, 89°15.011'E	Year-round
Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon	Boundaries within 23 nmi (26.5 m; 42.6 km) of the coast from 47°07' N to 48°30' N latitude 48°30'01.995"N, 125°58'38.786"W 48°16'55.605"N, 125°38'52.052"W 48°23'07.353"N, 125°17'10.935"W 48°12'38.241"N, 125°16'42.339"W 47°58'20.361"N, 125°31'14.517"W 47°58'20.361"N, 126°06'16.322"W 48°09'46.665"N, 126°25'48.758"W	Olympic NMS: December, January, March, and May, annually The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually

Name of Area	Location of Area	Months of Importance
Abrolhos Bank	16°35'34.909"38°52'30.455" 16°35'31.619"38°43'41.069" 16°40'00.131"37°23'52.492" 19°30'59.069"37°23'52.446" 19°30'59.974"39°33'38.351" 19°20'24.752"39°30'33.03" 18°52'16.884"39°32'31.789" 18°45'09.937"39°32'27.709" 18°30'59.345"39°30'59.669" 18°27'28.985"39°30'13.453" 18°17'30.429"39°26'21.073" 18°07'43.518"39°19'52.924" 18°09'24.931"39°16'24.913" 18°10'04.585"39°12'30.425" 18°10'20.682"38°39'06.185" 18°08'50.404"38°35'00.059" 18°06'05.466"38°31'41.385" 18°02'09.399"38°29'26.179" 17°58'01.372"38°28'45.409" 17°53'58.883"38°29'34.612" 16°48'58.768"38°55'23.768" 16°43'15.682"38°53'40.007"	August through November, annually

Attachment 2 – Authorized Take Estimates by Operating Region

The Holder of this Authorization must maintain a running calculation/estimation of takes of each species over the effective period of these regulations. The Holder of this Authorization must also coordinate with the Holder of the Letter of Authorization issued to the USNS ABLE, the USNS VICTORIOUS, and the USNS IMPECCABLE, to ensure that these conditions are met for all vessels combined.

Category	Requested Take Authorization Level A harassment
Mysticetes	No more than 6 over the course of the regulations.
Odontocetes	No more than 25 over the course of the regulations.
Pinnipeds	No more than 25 over the course of the regulations.

East of Japan—Operational Area 1	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Blue whale	2
Fin whale	2
Sei whale	7
Bryde's whale	7
Minke whale	16
North Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Baird's beaked whale	21
Cuvier's beaked whale	37
Ginkgo-toothed beaked whale	5
Hubbs' beaked whale	5
False killer whale	32
Pygmy killer whale	19
Short-finned pilot whale	118
Risso's dolphin	92
Common dolphin	658
Bottlenose dolphin	136
Spinner dolphin	0
Pantropical spotted Dolphin	88
Striped dolphin	57
Rough-toothed dolphin	44
Fraser's dolphin	45
Pacific white-sided dolphin	94

North Philippine Sea—Operational Area 2
3 Missions

Animal	Requested Take Authorization Level B harassment
Bryde's whale	21
Minke whale	304
North Pacific right whale	1
Sperm whale	143
<i>Kogia</i> spp.	281
Cuvier's beaked whale	146
Blainville's beaked whale	14
Ginkgo-toothed beaked whale	14
Killer whale	14
False killer whale	107
Pygmy killer whale	76
Melon-headed whale	45
Short-finned pilot whale	826
Risso's dolphin	833
Common dolphin	1644
Bottlenose dolphin	271
Spinner dolphin	0
Pantropical spotted dolphin	570
Striped dolphin	1369
Rough-toothed dolphin	481
Fraser's dolphin	265
Pacific white-sided dolphin	466

West Philippine Sea—Operational Area 3 3 Missions	
Animal	Requested Take Authorization Level B harassment
Fin whale	14
Bryde's whale	42
Minke whale	141
Humpback whale (winter only)	2
Sperm whale	31
<i>Kogia</i> spp.	106
Cuvier's beaked whale	10
Blainville's beaked whale	20
Ginkgo-toothed beaked whale	19
False killer whale	131
Pygmy killer whale	94
Melon-headed whale	56
Short-finned pilot whale	215
Risso's dolphin	575
Common dolphin	3287
Bottlenose dolphin	473
Spinner dolphin	0
Pantropical spotted dolphin	307
Striped dolphin	343
Rough-toothed dolphin	336
Fraser's dolphin	20
Pacific white-sided dolphin	559

Offshore Guam—Operational Area 4

3 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	3
Fin whale	11
Sei whale	9
Bryde's whale	13
Minke whale	8
Humpback whale (winter only)	580
Sperm whale	31
<i>Kogia</i> spp.	386
Cuvier's beaked whale	191
Blainville's beaked whale	36
Ginkgo-toothed beaked whale	16
Longman's beaked whale	13
False killer whale	36
Pygmy killer whale	4
Melon-headed whale	137
Killer whale	6
Short-finned pilot whale	54
Risso's dolphin	34
Common dolphin	0
Bottlenose dolphin	0
Spinner dolphin	102
Pantropical spotted dolphin	570
Striped dolphin	172
Rough-toothed dolphin	15
Fraser's dolphin	127

Sea of Japan—Operational Area 5	
2 Missions	
Animal	Requested Take Authorization Level B harassment
Fin whale	44
Bryde's whale	5
Minke whale	16
Minke whale J stock	6
Gray whale	0
N. Pacific right whale	1
Sperm whale	41
Stejneger's beaked whale	80
Baird's beaked whale	18
Cuvier's beaked whale	245
Ginkgo-toothed beaked whale	30
False killer whale	161
Melon-headed whale	0
Short-finned pilot whale	33
Risso's dolphin	350
Common dolphin	3615
Bottlenose dolphin	32
Spinner dolphin	0
Pantropical spotted dolphin	285
Pacific white-sided dolphin	94
Dall's porpoise	1412

East China Sea—Operational Area 6	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Fin whale	4
Bryde's whale	9
Minke whale	58
Minke whale J stock	24
Gray whale (winter only)	1
N. Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Cuvier's beaked whale	64
Blainville's beaked whale	13
Ginkgo-toothed beaked whale	5
False killer whale	17
Pygmy killer whale	4
Melon-headed whale	63
Short-finned pilot whale	27
Risso's dolphin	150
Common dolphin	658
Bottlenose dolphin	106
Spinner dolphin	0
Pantropical spotted dolphin	154
Striped dolphin	172
Rough-toothed dolphin	73
Fraser's dolphin	67
Pacific white-sided dolphin	0

South China Sea—Operational Area 7	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Fin whale	4
Bryde's whale	9
Minke whale	43
Gray whale (winter only)	1
North Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Cuvier's beaked whale	0
Blainville's beaked whale	7
Ginkgo-toothed beaked whale	7
False killer whale	19
Pygmy killer whale	4
Melon-headed whale	70
Short-finned pilot whale	22
Risso's dolphin	175
Common dolphin	658
Bottlenose dolphin	85
Spinner dolphin	3249
Pantropical spotted dolphin	132
Striped dolphin	172
Rough-toothed dolphin	73
Fraser's dolphin	67

Offshore Japan 25-40° N—Operational Area 8

1 Mission

Animal	Requested Take Authorization Level B harassment
Blue whale	11
Fin whale	5
Sei whale	15
Bryde's whale	21
Minke whale	13
Sperm whale	11
<i>Kogia</i> spp.	211
Baird's beaked whale	3
Cuvier's beaked whale	37
<i>Mesoplodon</i> spp.	16
False killer whale	117
Pygmy killer whale	7
Melon-headed whale	41
Short-finned pilot whale	0
Risso's dolphin	34
Common dolphin	3615
Bottlenose dolphin	17
Spinner dolphin	0
Pantropical spotted dolphin	307
Striped dolphin	856
Rough-toothed dolphin	15
Pacific white-sided dolphin	102
Hawaiian monk seal	1

Offshore Japan 10-25° N—Operational Area 9

1 Mission

Animal	Requested Take Authorization Level B harassment
Bryde's whale	9
Sperm whale	0
<i>Kogia</i> spp.	0
Cuvier's beaked whale	19
False killer whale	34
Melon-headed whale	19
Short-finned pilot whale	22
Risso's dolphin	42
Common dolphin	1,644
Bottlenose dolphin	17
Spinner dolphin	102
Pantropical spotted dolphin	395
Striped dolphin	172
Rough-toothed dolphin	0

Hawaii North—Operational Area 10

2 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	8
Fin whale	6
Bryde's whale	12
Minke whale	8
Humpback whale	91
Sperm whale	73
<i>Kogia</i> spp.	506
Cuvier's beaked whale	205
Blainville's beaked whale	39
Longman's beaked whale	14
Killer whale	6
False killer whale (Hawaii Pelagic)	9
False killer whale (Hawaii Insular)	9
Pygmy killer whale	17
Melon-headed whale	51
Short-finned pilot whale	66
Risso's dolphin	44
Bottlenose dolphin (Hawaii Pelagic)	193
Bottlenose dolphin (Kauai/Niihau)	1
Spinner dolphin	16
Pantropical spotted dolphin	43
Striped dolphin	62
Rough-toothed dolphin	164
Fraser's dolphin	156
Hawaiian monk seal	4

Hawaii South—Operational Area 11	
2 Missions	
Animal	Requested Take Authorization Level B harassment
Blue whale	4
Fin whale	3
Bryde's whale	6
Minke whale	6
Humpback whale	0
Sperm whale	48
<i>Kogia</i> spp.	257
Cuvier's beaked whale	122
Blainville's beaked whale	23
Longman's beaked whale	8
Killer whale	3
False killer whale (Hawaii Pelagic)	5
False killer whale (Hawaii Insular)	5
Pygmy killer whale	9
Melon-headed whale	27
Short-finned pilot whale	63
Risso's dolphin	23
Bottlenose dolphin (Hawaii Pelagic)	25
Bottlenose dolphin (Oahu)	1
Bottlenose dolphin (4-Island)	1
Bottlenose dolphin	3
Spinner dolphin	20
Pantropical spotted dolphin	53
Striped dolphin	78
Rough-toothed dolphin	87
Fraser's dolphin	83
Hawaiian monk seal	3



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

LETTER OF AUTHORIZATION

The Chief of Naval Operations, Department of the Navy, 2000 Navy Pentagon, Washington, D.C. 20350-2000, and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to Navy operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar in accordance with 50 CFR Part 218, Subpart X—Taking of Marine Mammals Incidental to Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar subject to the provisions of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*; MMPA) and the following conditions:

1. This Authorization is valid for the period August 15, 2012, through August 14, 2013.
2. This Authorization is valid only for the unintentional taking of the species of marine mammals identified in 50 CFR § 218.230(b) and Condition 5 of this Authorization governing the taking of these animals incidental to the activity specified in Condition 3. This authorization shall be valid only for take consistent with the provisions in 50 CFR § 218.232 and the terms of this Authorization as specified in this Authorization.
3. This Authorization is valid only for activities associated with the operation of the SURTASS LFA Sonar onboard the United States Naval Ship (USNS) IMPECCABLE (T-AGOS 23). The signals transmitted by the SURTASS LFA sonar source must be between 100 and 500 Hertz (Hz) with a source level for each of the 18 projectors at no more than 215 decibels (dB) re: 1 micro Pascal (μPa) at 1 meter (m) root mean square (rms)) with a maximum duty cycle of 20 percent.
4. This Authorization, combined with Authorizations for the USNS VICTORIOUS (T-AGOS 19), USNS ABLE (T-AGOS 20), and USNS EFFECTIVE (T-AGOS 21), is valid for an estimated total of 20 nominal active sonar missions among the four SURTASS LFA sonar vessels (or equivalent shorter missions but not to exceed a total of 432 hours of transmit time per vessel during the period of effectiveness of this Authorization) within the following areas:
 - (a) Up to 16 nominal missions in the northwestern Pacific Ocean which includes the following operational areas: east of Japan; the North Philippine Sea; the west Philippine Sea; offshore Guam; the Sea of Japan; the East China Sea; the South China Sea; and offshore Japan (25° to 40° N and 10° to 25° N).

USNS IMPECCABLE



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- (b) Up to 4 nominal missions in the Hawaii Range Complex which includes the northern and southern Hawaii operational areas.

SPECIES AUTHORIZED AND LEVEL OF TAKE

5. The incidental take of marine mammals under the activity identified in Conditions 3 and 4 of this Authorization is limited to the following species:
- (a) **Mysticetes:** blue whale (*Balaenoptera musculus*), Bryde's whale (*Balaenoptera edeni*), fin whale (*Balaenoptera physalus*), gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*), minke whale (*Balaenoptera acutorostrata*), northern Pacific right whale (*Eubalena japonica*), pygmy right whale (*Capera marginata*), sei whale (*Balaenoptera borealis*), and southern right whale (*Eubalena australis*).
 - (b) **Odontocetes:** Baird's beaked whale (*Berardius bairdii*), Blainville's beaked whale (*Mesoplodon densirostris*), common bottlenose dolphin (*Tursiops truncatus*), Cuvier's beaked whale (*Ziphius cavirostris*), Dall's porpoise (*Phocoenoides dalli*), dwarf sperm and pygmy sperm whales (*Kogia simus* and *K. breviceps*), false killer whale (includes Hawaii pelagic and insular stocks) (*Pseudorca crassidens*), Fraser's dolphin (*Lagenodelphis hosei*), Gervais' beaked whale (*Mesoplodon europaeus*), ginkgo-toothed beaked whale (*Mesoplodon ginkgodens*), Gray's beaked whale (*Mesoplodon grayi*), Hector's beaked whale (*Mesoplodon hectori*), Hubbs' beaked whale (*Mesoplodon carhubbsi*), Indo-Pacific bottlenose dolphin (*Tursiops aduncus*), killer whale (*Orca orcinus*), long-beaked common dolphin (*Delphinus capensis*), Longman's beaked whale (*Indopacetus pacificus*), melon-headed whale (*Peponocephala electra*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), pantropical spotted dolphin (*Stenella attenuata*), Perrin's beaked whale (*Mesoplodon perrini*), pygmy beaked whale (*Mesoplodon peruvianus*), pygmy killer whale (*Feresa attenuata*), Risso's dolphin (*Grampus griseus*), rough-toothed dolphin (*Steno bredanensis*), short-beaked common dolphin (*Delphinus delphis*), short-finned pilot whale (*Globicephala macrorhynchus*), Sowerby's beaked whale (*Mesoplodon bidens*), spade-toothed beaked whale (*Mesoplodon traversii*), sperm whale (*Physeter macrocephalus*), spinner dolphin (*Stenella longirostris*), Stejneger's beaked whale (*Mesoplodon stejnegeri*), strap-toothed beaked whale (*Mesoplodon layardii*), striped dolphin (*Stenella coeruleoalba*), and True's beaked whale (*Mesoplodon mirus*).
 - (c) **Pinnipeds:** Hawaiian monk seal (*Monachus shauinslandi*)
6. The taking of marine mammals by the Holder of this Authorization is limited to the incidental taking of marine mammal species identified in Condition 5 by Level A and Level B harassment (as defined in the MMPA and 50 CFR § 216.3) within those areas authorized under Condition 4. The take, by harassment, that occurs during the year covered by this Authorization may not exceed the amount identified in Attachment 2.
7. Taking of marine mammal species not listed under Condition 5 by harassment, injury, or mortality, or the taking by mortality of any marine mammal species listed under Condition 5 is prohibited.

MITIGATION

8. The Holder of this Authorization, and any individuals operating under his authority, must conduct the activity identified in 50 CFR § 218.230 and Condition 3 of this Authorization in a manner that minimizes, to the greatest extent practicable, adverse impacts on marine mammals, their habitats, and the availability of marine mammals for subsistence. When conducting operations identified in 50 CFR § 218.230, the following mitigation measures must be implemented:
 - (a) The Holder of this Authorization, and any individuals operating under his authority, must not broadcast the SURTASS LFA sonar signal at a frequency greater than 500 Hz.
 - (b) Through mitigation described under 50 CFR § 218.234 and Condition 9 (Mitigation Monitoring) of this Authorization, the Holder of this Authorization and any individuals operating under his authority must ensure, to the greatest extent practicable, that no marine mammal is subjected to a sound pressure level of 180 dB re: 1 μ Pa (rms) or greater.
 - (c) **LFA Sonar Mitigation Zone:** Prior to commencing and during SURTASS LFA sonar transmissions, the Holder of this Authorization will use near-real-time environmental data and underwater acoustic prediction models to determine the propagation of the SURTASS LFA sonar signals in the operating area. The Holder must determine the distance from the SURTASS LFA sonar source to the 180-dB re: 1 μ Pa isopleth (rms) (i.e., the LFA sonar mitigation zone) in order to comply with Condition 8(b).
 - (i) The Holder will update these sound field estimates every 12 hours, or more frequently when meteorological or oceanographic conditions change.
 - (d) **Additional 1-km Buffer Zone:** The Holder of this Authorization will establish a one-kilometer (1-km) buffer zone around the LFA sonar mitigation zone.
 - (e) **Ramp-Up Procedures for the HF/M3 System:** The Holder of a Letter of Authorization will ramp up the High Frequency / Marine Mammal Monitoring (HF/M3) active sonar referenced in 50 CFR § 218.234 from a power level beginning at a maximum source sound pressure level of 180 dB re: 1 μ Pa (rms) in 10-dB increments to operating levels over a period of no less than five minutes:
 - (i) At least 30 minutes prior to any SURTASS LFA sonar transmission;
 - (ii) Prior to any SURTASS LFA sonar calibrations or testing that are not part of regular SURTASS LFA sonar transmissions described in 50 CFR § 218.230; and
 - (iii) Anytime after the Holder of this Authorization has powered-down the HF/M3 active sonar source for more than two minutes.
 - (iv) The Holder of a Letter of Authorization will not increase the HF/M3 active sonar system's sound pressure level once they detect a marine mammal. The Holder may resume a ramp-up of the HF/M3 sonar system once marine mammals are no longer detected by the HF/M3 active sonar system, passive acoustic monitoring, or visual monitoring described in Condition 9.

- (f) **Suspension/Delay for SURTASS LFA Sonar Transmissions:** If the Holder of this Authorization detects a marine mammal through monitoring required under 50 CFR § 218.235 and Condition 9 within either the LFA sonar mitigation zone or the 1-km buffer zone around the surveillance vessel, the Holder will immediately suspend or delay SURTASS LFA transmissions.
- (g) **Resumption of SURTASS LFA Sonar Transmissions:** The Holder of this Authorization may resume/commence SURTASS LFA sonar transmissions 15 minutes after:
- (i) All marine mammals have left the LFA sonar mitigation zone and the 1-km buffer zone around the surveillance vessel; and
 - (ii) There is no further detection of any marine mammal within the LFA sonar mitigation zone plus the 1-km buffer zone as determined by the visual, passive or active acoustic monitoring protocols described in 50 CFR § 218.235 and Condition 9.
- (h) **Geographic Restrictions:** The Holder of this Authorization will not operate SURTASS LFA sonar such that the SURTASS LFA sonar sound field exceeds 180 dB re: 1 μ Pa (rms):
- (i) At a distance of less than or equal to 22 km (14 miles (mi); 22 nautical miles (nm)) from any coastline, including offshore islands.
 - (ii) At a distance of less than or equal to 1 km (0.62 mi; 0.54 nm) seaward of the outer perimeter of any offshore biologically important area for marine mammals designated in 50 CFR § 218.234(f)(2) and described in Condition 8(h)(iii) during the period specified.
 - (iii) The Offshore Biologically Important Areas (OBIA) for marine mammals (with specified periods) for SURTASS LFA sonar operations are:

OBIA	Period of Effectiveness
Georges Bank	Year-round
Roseway Basin Right Whale Conservation Area	June through December, annually
Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS)	January 1 to November 14, annually
Southeastern U.S. Right Whale Seasonal Habitat	November 15 to April 15, annually
North Pacific Right Whale Critical Habitat	March through August, annually
Silver Bank and Navidad Bank	December through April, annually
Coastal waters of Gabon, Congo and Equatorial Guinea	June through October, annually
Patagonian Shelf Break	Year-round
Southern Right Whale Seasonal Habitat	May through December, annually
Central California NMSs	June through November, annually
Antarctic Convergence Zone	October through March, annually

Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk	June through November, annually
Coastal waters off Madagascar	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
Madagascar Plateau, Madagascar Ridge, and Walters Shoal	November through December, annually
Ligurian-Corsican-Provencal Basin and Western Pelagos Sanctuary in the Mediterranean Sea	July to August, annually
Hawaiian Islands Humpback Whale NMS and Penguin Bank	November through April, annually
Costa Rica Dome	Year-round
Great Barrier Reef Between 16° S and 21° S	May through September, annually
Bonney Upwelling on the southern coast of Australia	December through May, annually
Northern Bay of Bengal and Head of Swatch-of-No-Ground	Year-round
Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon	Olympic NMS: December, January, March, and May, annually The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually
Abrolhos Bank	August through November

Note: See § 218.234(f)(2) and Attachment 1 for coordinate information.

- (i) **Operational Exception for SURTASS LFA Sound Field in OBIA:** During military operations, SURTASS LFA sonar transmissions may exceed 180 dB re: 1 μ Pa (rms) within the boundaries of an OBIA, including operating within an OBIA, when the Holder of this Authorization determines that it is: 1) operationally necessary to continue tracking an existing underwater contact; or 2) operationally necessary to detect a new underwater contact within the OBIA. This exception does not apply to routine training and testing with the SURTASS LFA sonar systems.
- (j) **Mission Planning:** The Holder of this Authorization must maintain a running calculation/estimation of takes of each species over the effective period of these regulations. The Holder of this Authorization will plan all SURTASS LFA sonar missions to ensure that no more than 12 percent of any marine mammal stock listed in 50 CFR § 218.230(b)(1) through (3) would be taken by Level B harassment annually. This annual per-stock cap of 12 percent applies regardless of the number of LFA sonar vessels operating. The Holder of this Authorization must coordinate with the Holder of the Letters of Authorization issued to the USNS VICTORIOUS, USNS ABLE, and the USNS EFFECTIVE, to ensure that this condition is met for all vessels combined.

MITIGATION MONITORING

9. The Holder of this Authorization, and any individuals operating under his authority, must:
 - (a) Perform the following for visual mitigation monitoring:
 - (i) Marine mammal biologists qualified in conducting at-sea marine mammal visual monitoring from surface vessels will train and qualify designated ship personnel as lookouts to conduct at-sea visual monitoring.
 - (ii) Train the lookouts in the most effective means to ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if they spot marine mammals.
 - (iii) Conduct visual monitoring from the ship's bridge during daylight hours (30 minutes before sunrise until 30 minutes after sunset) during operations that employ SURTASS LFA sonar in the active mode. Maintain a topside watch with standard binoculars (7x) and with the naked eye.
 - (b) Perform the following for passive acoustic monitoring:
 - (i) Use the low frequency, passive SURTASS sonar system to listen for vocalizing marine mammals; and
 - (c) Perform the following for active acoustic monitoring:
 - (i) Use the HF/M3 active sonar to locate and track marine mammals in relation to the SURTASS LFA sonar vessel and the sound field produced by the SURTASS LFA sonar source array, subject to the ramp-up requirements in § 218.234(e) and Condition 8(e).
10. Mitigation monitoring under Conditions 9(a), (b), and (c) must:
 - (a) Commence at least 30 minutes before the first SURTASS LFA sonar transmission (30 minutes before sunrise for visual monitoring);
 - (b) Continue between transmission pings; and
 - (c) Continue for at least 15 minutes after completion of the SURTASS LFA sonar transmission exercise (30 minutes after sunset for visual monitoring), or if marine mammals are showing abnormal behavioral patterns, for a period of time until behavior patterns return to normal or conditions prevent continued observations.

MONITORING

11. The Holder of this Authorization for activities described in 50 CFR § 218.230 must:
 - (a) Cooperate with the NMFS and any other federal agency for monitoring the impacts of the activity on marine mammals; and
 - (b) Designate qualified on-site individuals to conduct the mitigation, monitoring and reporting activities specified in this Letter of Authorization.

12. The Holder of this Authorization will conduct all monitoring required under the Letter of Authorization to increase knowledge of the affected marine mammal species. The Holder of this Authorization must:

- (a) Convene a Scientific Advisory Group (SAG) to analyze different types of monitoring/research that could increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises.
- (b) Continue to assess data from the Marine Mammal Monitoring Program and work toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances. Any portions of the analyses conducted by these scientists based on these data that are determined to be unclassified after appropriate security reviews will be made publically available.
- (c) Continue to explore the feasibility of coordinating with other fleet assets and/or range monitoring programs to include the use of SURTASS LFA sonar towed horizontal line arrays to augment the collection of marine mammal vocalizations before, during, and after designated exercises.
- (d) Continue to collect ambient noise data and explore the feasibility of declassifying and archiving the ambient noise data for incorporation into appropriate ocean noise budget efforts.

REPORTING

13. The Holder of this Authorization must:

- (a) Provide a status update to the NMFS when the Holder submits the next annual application on efforts to assess the data collected by its undersea arrays and progress toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances.
- (b) Draft a plan of action outlining a strategy for implementing the Scientific Advisory Group's (SAG) recommendations for going forward with beaked whale and/or harbor porpoise research; or describe in writing why such research is not feasible/or is unlikely to increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises, to be followed by a meeting with NMFS to discuss any other potential options.
- (c) Systematically observe SURTASS LFA sonar operations for injured or disabled marine mammals and monitor the principal marine mammal stranding networks and other media to correlate analysis of any whale strandings that could potentially be associated with SURTASS LFA sonar operations.
 - (i) The Holder will ensure that the NMFS is notified immediately or as soon as clearance procedures allow if an injured, stranded, or dead marine mammal is found during or shortly after, and in the vicinity of, any SURTASS LFA operations. The Holder will report the incident to the Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Jeannine.Cody@noaa.gov.

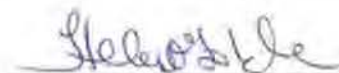
- (ii) The Holder will provide the NMFS with species or description of the animal(s), the condition of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available).
 - (iii) In the event that an injured, stranded, or dead marine mammal is found by the Holder that is not in the vicinity of, or found during or shortly after SURTASS LFA sonar operations, the Holder will report the same information to NMFS as listed above as soon as operationally feasible and clearance procedures allow.
- (d) In the event of a ship strike by the SURTASS LFA sonar vessel, at any time or place, the Holder must:
- (i) Immediately, or as soon as clearance procedures allow, report to the NMFS the species identification (if known), location (lat/long) of the animal (or the strike if the animal has disappeared), and whether the animal is alive or dead (or unknown);
 - (ii) Report the incident to the Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Jeannine.Cody@noaa.gov;
 - (iii) Report to the NMFS as soon as operationally feasible the size and length of the animal, an estimate of the injury status (e.g., dead, injured but alive, injured and moving, unknown, etc.), vessel class/type and operational status;
 - (iv) Report to the NMFS the vessel length, speed, and heading as soon as feasible; and
 - (v) Provide the NMFS a photo or video, if equipment is available.
- (e) Submit classified and unclassified quarterly mission reports to the Director, Office of Protected Resources, NMFS, no later than 30 days after the end of each quarter beginning on the date of effectiveness of a Letter of Authorization or as specified in the appropriate Letter of Authorization. Each quarterly mission report will include all active-mode missions completed during that quarter. At a minimum, each classified mission report must contain the following information:
- (i) Dates, times, and location of each vessel during each mission;
 - (ii) Information on sonar transmissions during each mission and records of any delays or suspensions;
 - (iii) Location of the SURTASS LFA sonar mitigation and buffer zones in relation to the LFA sonar array;
 - (iv) Marine mammal observations including animal type and/or species, number of animals sighted, date and time of observations, type of detection (visual, passive acoustic, HF/M3 sonar), bearing and range from vessel, abnormal behavior (if any), and remarks/narrative (as necessary).
 - (v) The report will include the Navy's estimates of the percentages of marine mammal stocks affected (both for the quarter and cumulatively for the year

covered by the Authorization) by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on operating locations, dates/times of operations, system characteristics, oceanographic environmental conditions, and animal demographics.

- (vi) In the event that no SURTASS LFA sonar missions are completed during a quarter, a report of negative activity will be provided.
- (f) Submit an annual, unclassified report to the Director, Office of Protected Resources, NMFS, no later than 45 days after expiration of this Authorization. At a minimum, the annual report will contain the following:
- (i) An unclassified summary of the year's quarterly reports;
 - (ii) The Navy's estimates of the percentages of marine mammal stocks affected by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on operating locations, dates/times of operations, system characteristics, oceanographic environmental conditions, and animal demographics.
 - (iii) An analysis of the effectiveness of the mitigation measures with recommendations for improvements where applicable;
 - (iv) An assessment of any long-term effects from SURTASS LFA sonar operations; and
 - (v) Any discernible or estimated cumulative impacts from SURTASS LFA sonar operations.

14. The Holder of this Authorization must comply with the Terms and Conditions of the Incidental Take Statement corresponding to the Endangered Species Act Biological Opinion issued to the Navy and the National Marine Fisheries Service's Office of Protected Resources, Permits and Conservation Division.
15. A copy of this Authorization must be in the possession of the Officer in Charge of the Military Detachment (MILDET) on board the USNS IMPECCABLE in order to conduct the activity under the authority of this Letter of Authorization and Incidental Take Statement.

AUG 15 2012



Helen M. Golde, Acting Director
Office of Protected Resources
National Marine Fisheries Service

Date

Attachment 1 – Table 1 OBIA Coordinates

Name of Area	Location of Area	Months of Importance
Georges Bank	40°00'N, 72°30'W 39°37'N, 72°09'W 39°54'N, 71°43'W 40°02'N, 71°20'W 40°08'N, 71°01'W 40°04'N, 70°44'W 40°00'N, 69°24'W 40°16'N, 68°27'W 40°34'N, 67°13'W 41°00'N, 66°24'W 41°52'N, 65°47'W 42°20'N, 66°06'W 42°18'N, 67°23'W	Year-round
Roseway Basin Right Whale Conservation Area	43°05'N, 65°40'W 43°05'N, 65°03'W 42°45'N, 65°40'W 42°45'N, 65°03'W	June through December, annually
Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS)	41°00.000'N, 69°05.000'W 42°09.000'N, 67°08.400'W 42°53.436'N, 67°43.873'W 44°12.541'N, 67°16.847'W 44°14.911'N, 67°08.936'W 44°21.538'N, 67°03.663'W 44°26.736'N, 67°09.596'W 44°16.805'N, 67°27.394'W 44°11.118'N, 67°56.398'W 43°59.240'N, 68°08.263'W 43°36.800'N, 68°46.496'W 43°33.925'N, 69°19.455'W 43°32.008'N, 69°44.504'W 43°21.922'N, 70°06.257'W 43°04.084'N, 70°21.418'W 42°51.982'N, 70°31.965'W 42°45.187'N, 70°23.396'W 42°39.068'N, 70°30.188'W 42°32.892'N, 70°35.873'W 42°07.748'N, 70°28.257'W 42°05.592'N, 70°02.136'W 42°03.664'N, 69°44.000'W 41°40.000'N, 69°45.000'W	January 1 to November 14, annually
Southeastern U.S. Right Whale Seasonal Habitat	Critical Habitat Boundaries are coastal waters between 31°15' N and 30°15'N from the coast out 15 nautical miles (nmi); and the coastal waters between 30°15' N and 28°00'N from the coast out 5 nmi. (50 CFR §226.13(c)) OBIA Boundaries are coastal waters between 31°15'N and 30°15'N from 12 to 15 nmi.	November 15 to April 15, annually
North Pacific Right Whale Critical Habitat	57°03'N, 153°00'W 57°18'N, 151°30'W 57°00'N, 151°30'W 56°45'N, 153°00'W (50 CFR §226.215)	March through August, annually

Name of Area	Location of Area	Months of Importance
Silver Bank and Navidad Bank	Silver Bank: 20° 38.899'N, 69° 23.640'W 20° 55.706'N, 69° 57.984'W 20° 25.221'N, 70° 00.387'W 20° 12.833'N, 69° 40.604'W 20° 13.918'N, 69° 31.518'W 20° 28.680'N, 69° 31.900'W Navidad Bank: 20° 15.596'N, 68° 47.967'W 20° 11.971'N, 68° 54.810'W 19° 52.514'N, 69° 00.443'W 19° 54.957'N, 68° 51.430'W 19° 51.513'N, 68° 41.399'W	December through April, annually
Coastal waters of Gabon, Congo and Equatorial Guinea	An exclusion zone following the 500-m isobath extending from 3°31.055'N, 9°12.226'E in the north offshore of Malabo southward to 8°57.470'S, 12°55.873'E offshore of Luanda.	June through October, annually
Patagonian Shelf Break	Between 200- and 2000-m isobaths and the following latitudes: 35°00'S, 39°00'S, 40°40'S, 42°30'S, 46°00'S, 48°50'S.	Year-round
Southern Right Whale Seasonal Habitat	Coastal waters between 42°00'S and 43°00'S from 12 to 15 nmi including the enclosed bays of Golfo Nuevo, Golfo San Jose, and San Matias. Golfos San Jose and San Nuevo are within 22 km (14 mi; 12 nmi) coastal exclusion zone.	May through December, annually
Central California National Marine Sanctuaries	Single stratum boundary created from the Cordell Bank (15 CFR 922.10), Gulf of the Farallones (15 CFR 922.80), and Monterey Bay (15 CFR 922.30) NMS legal boundaries. Monterey Bay NMS includes the Davidson Seamount Management Zone.	June through November, annually
Antarctic Convergence Zone	30°E to 80°E, 45°S 80°E to 150°E, 55°S 150°E to 50°W, 60°S 50°W to 30°E, 50°S	October through March, annually

Name of Area	Location of Area	Months of Importance
Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk	54°09.436'N, 143°47.408'W 54°09.436'N, 143°17.354'W 54°01.161'N, 143°17.354'W 53°53.580'N, 143°13.398'W 53°26.963'N, 143°28.230'W 53°07.013'N, 143°35.481'W 52°48.705'N, 143°38.447'W 52°32.077'N, 143°37.788'W 52°21.605'N, 143°34.163'W 52°09.470'N, 143°26.582'W 51°57.686'N, 143°30.208'W 51°36.033'N, 143°42.794'W 51°08.082'N, 143°51.301'W 51°08.082'N, 144°16.742'W 51°24.514'N, 144°11.139'W 51°48.116'N, 144°10.809'W 52°03.194'N, 144°20.363'W 52°23.235'N, 144°10.150'W 52°28.674'N, 144°12.787'W 52°42.523'N, 144°10.150'W 53°12.972'N, 143°55.648'W 53°18.505'N, 143°56.637'W 53°23.041'N, 143°53.011'W 53°28.250'N, 143°53.341'W 53°44.039'N, 143°49.056'W 53°53.207'N, 143°50.045'W 53°59.819'N, 143°48.067'W	June through November, annually
Coastal waters off Madagascar	16°03'55.04"S, 50°27'12.59"E 16°12'23.03"S, 51°03'37.38"E 24°30'45.06"S, 48°26'00.94"E 24°15'28.07"S, 47°46'51.16"E 22°18'00.74"S, 48°14'13.52"E 20°52'24.12"S, 48°43'13.49"E 19°22'33.24"S, 49°15'45.47"E 18°29'46.08"S, 49°37'32.25"E 17°38'27.89"S, 49°44'27.17"E 17°24'39.12"S, 49°39'17.03"E 17°19'35.34"S, 49°54'23.82"E 16°45'41.71"S, 50°15'56.35"E	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
Madagascar Plateau, Madagascar Ridge, and Walters Shoal	25°55'20.00"S, 44°05'15.45"E 25°46'31.36"S, 47°22'35.90"E 27°02'37.71"S, 48°03'31.08"E 35°13'51.37"S, 46°26'19.98"E 35°14'28.59"S, 42°35'49.20"E 31°36'57.96"S, 42°37'49.35"E 27°41'11.21"S, 44°30'11.01"E	November through December, annually

Name of Area	Location of Area	Months of Importance
Ligurian-Corsican-Provencal Basin and Western Pelagos Sanctuary in the Mediterranean Sea	42°50.271'N, 06°31.883'E 42°55.603'N, 06°43.418'E 43°04.374'N, 06°52.165'E 43°12.600'N, 07°10.440'E 43°21.720'N, 07°19.380'E 43°30.600'N, 07°32.220'E 43°33.900'N, 07°49.920'E 43°36.420'N, 08°05.580'E 43°42.600'N, 08°22.140'E 43°50.880'N, 08°34.500'E 43°58.560'N, 08°47.700'E 43°59.040'N, 08°56.040'E 43°57.047'N, 09°03.540'E 43°52.260'N, 09°08.520'E 43°47.580'N, 09°13.500'E 43°36.060'N, 09°16.620'E 43°28.440'N, 09°05.820'E 43°21.360'N, 09°02.100'E 43°16.020'N, 08°57.240'E 43°04.440'N, 08°47.580'E 42°54.900'N, 08°35.400'E 42°45.900'N, 08°27.540'E 42°36.060'N, 08°22.020'E 42°22.620'N, 08°15.849'E 42°07.202'N, 08°17.174'E 41°52.800'N, 08°15.720'E 41°39.780'N, 08°05.280'E 41°28.200'N, 08°51.600'E 42°57.060'N, 06°19.860'E	July to August, annually
Hawaiian Islands Humpback Whale NMS and Penguin Bank	21°10'02.179"N, 157°30'58.217"W 21°09'46.815"N, 157°30'22.367"W 21°06'39.882"N, 157°31'00.778"W 21°02'51.976"N, 157°30'30.049"W 20°59'52.725"N, 157°29'28.591"W 20°58'05.174"N, 157°27'35.919"W 20°55'49.456"N, 157°30'58.217"W 20°50'44.729"N, 157°42'42.418"W 20°51'02.654"N, 157°44'45.333"W 20°53'56.784"N, 157°46'04.716"W 20°56'32.988"N, 157°45'33.987"W 21°01'27.472"N, 157°43'10.586"W 21°05'20.499"N, 157°39'27.802"W 21°10'02.179"N, 157°30'58.217"W	November through April, annually
Costa Rica Dome	Centered at 9°N and 88°W	Year-round

Name of Area	Location of Area	Months of Importance
Great Barrier Reef Between 16° S and 21° S	16°01.829'S, 145°38.783'E 15°52.215'S, 146°20.936'E 17°28.354'S, 146°59.392'E 20°16.228'S, 151°39.674'E 20°58.381'S, 150°30.897'E 20°17.007'S, 149°38.247'E 20°10.941'S, 149°18.247'E 20°02.403'S, 149°12.623'E 19°53.287'S, 149°03.986'E 19°49.866'S, 148°52.135'E 19°53.287'S, 148°44.302'E 19°47.965'S, 148°36.870'E 19°47.205'S, 148°26.024'E 19°19.978'S, 147°39.626'E 19°14.065'S, 147°37.014'E 19°08.913'S, 147°31.993'E 19°05.667'S, 147°24.160'E 19°07.576'S, 147°18.134'E 18°51.718'S, 146°51.219'E 18°44.258'S, 146°54.031'E 18°37.175'S, 146°51.420'E 18°31.620'S, 146°43.385'E 18°27.595'S, 146°40.573'E 17°36.676'S, 146°20.488'E 17°20.484'S, 146°16.671'E 17°07.745'S, 146°13.056'E 16°49.769'S, 146°11.047'E 16°41.835'S, 146°03.817'E 16°39.706'S, 145°54.979'E	May through September, annually
Bonney Upwelling on the west coast of Australia	37°12'20.036"S, 139°31'17.703"E 37°37'33.815"S, 139°42'42.508"E 38°10'36.144"S, 140°22'57.345"E 38°44'50.558"S, 141°33'50.342"E 39°07'04.125"S, 141°11'00.733"E 37°28'33.179"S, 139°10'52.263"E	December through May, annually
Northern Bay of Bengal and Head of Swatch-of-No-Ground	20°59.735'N, 89°07.675'E 20°55.494'N, 89°09.484'E 20°52.883'N, 89°12.704'E 20°55.275'N, 89°18.133'E 21°04.558'N, 89°25.294'E 21°12.655'N, 89°25.354'E 21°13.279'N, 89°16.833'E 21°06.347'N, 89°15.011'E	Year-round
Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon	Boundaries within 23 nmi (26.5 m; 42.6 km) of the coast from 47°07' N to 48°30' N latitude 48°30'01.995"N, 125°58'38.786"W 48°16'55.605"N, 125°38'52.052"W 48°23'07.353"N, 125°17'10.935"W 48°12'38.241"N, 125°16'42.339"W 47°58'20.361"N, 125°31'14.517"W 47°58'20.361"N, 126°06'16.322"W 48°09'46.665"N, 126°25'48.758"W	Olympic NMS: December, January, March, and May, annually The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually

Name of Area	Location of Area	Months of Importance
Abrolhos Bank	16°35'34.909"38°52'30.455" 16°35'31.619"38°43'41.069" 16°40'00.131"37°23'52.492" 19°30'59.069"37°23'52.446" 19°30'59.974"39°33'38.351" 19°20'24.752"39°30'33.03" 18°52'16.884"39°32'31.789" 18°45'09.937"39°32'27.709" 18°30'59.345"39°30'59.669" 18°27'28.985"39°30'13.453" 18°17'30.429"39°26'21.073" 18°07'43.518"39°19'52.924" 18°09'24.931"39°16'24.913" 18°10'04.585"39°12'30.425" 18°10'20.682"38°39'06.185" 18°08'50.404"38°35'00.059" 18°06'05.466"38°31'41.385" 18°02'09.399"38°29'26.179" 17°58'01.372"38°28'45.409" 17°53'58.883"38°29'34.612" 16°48'58.768"38°55'23.768" 16°43'15.682"38°53'40.007"	August through November, annually

Attachment 2 – Authorized Take Estimates by Operating Region

The Holder of this Authorization must maintain a running calculation/estimation of takes of each species over the effective period of these regulations. The Holder of this Authorization must also coordinate with the Holder of the Letter of Authorization issued to the USNS ABLE, the USNS VICTORIOUS, and the USNS EFFECTIVE, to ensure that these conditions are met for all vessels combined.

Category	Requested Take Authorization Level A harassment
Mysticetes	No more than 6 over the course of the regulations.
Odontocetes	No more than 25 over the course of the regulations.
Pinnipeds	No more than 25 over the course of the regulations.

East of Japan—Operational Area 1	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Blue whale	2
Fin whale	2
Sei whale	7
Bryde's whale	7
Minke whale	16
North Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Baird's beaked whale	21
Cuvier's beaked whale	37
Ginkgo-toothed beaked whale	5
Hubbs' beaked whale	5
False killer whale	32
Pygmy killer whale	19
Short-finned pilot whale	118
Risso's dolphin	92
Common dolphin	658
Bottlenose dolphin	136
Spinner dolphin	0
Pantropical spotted Dolphin	88
Striped dolphin	57
Rough-toothed dolphin	44
Fraser's dolphin	45
Pacific white-sided dolphin	94

North Philippine Sea—Operational Area 2	
3 Missions	
Animal	Requested Take Authorization Level B harassment
Bryde's whale	21
Minke whale	304
North Pacific right whale	1
Sperm whale	143
<i>Kogia</i> spp.	281
Cuvier's beaked whale	146
Blainville's beaked whale	14
Ginkgo-toothed beaked whale	14
Killer whale	14
False killer whale	107
Pygmy killer whale	76
Melon-headed whale	45
Short-finned pilot whale	826
Risso's dolphin	833
Common dolphin	1644
Bottlenose dolphin	271
Spinner dolphin	0
Pantropical spotted dolphin	570
Striped dolphin	1369
Rough-toothed dolphin	481
Fraser's dolphin	265
Pacific white-sided dolphin	466

West Philippine Sea—Operational Area 3	
3 Missions	
Animal	Requested Take Authorization Level B harassment
Fin whale	14
Bryde's whale	42
Minke whale	141
Humpback whale (winter only)	2
Sperm whale	31
<i>Kogia</i> spp.	106
Cuvier's beaked whale	10
Blainville's beaked whale	20
Ginkgo-toothed beaked whale	19
False killer whale	131
Pygmy killer whale	94
Melon-headed whale	56
Short-finned pilot whale	215
Risso's dolphin	575
Common dolphin	3287
Bottlenose dolphin	473
Spinner dolphin	0
Pantropical spotted dolphin	307
Striped dolphin	343
Rough-toothed dolphin	336
Fraser's dolphin	20
Pacific white-sided dolphin	559

Offshore Guam—Operational Area 4

3 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	3
Fin whale	11
Sei whale	9
Bryde's whale	13
Minke whale	8
Humpback whale (winter only)	580
Sperm whale	31
<i>Kogia</i> spp.	386
Cuvier's beaked whale	191
Blainville's beaked whale	36
Ginkgo-toothed beaked whale	16
Longman's beaked whale	13
False killer whale	36
Pygmy killer whale	4
Melon-headed whale	137
Killer whale	6
Short-finned pilot whale	54
Risso's dolphin	34
Common dolphin	0
Bottlenose dolphin	0
Spinner dolphin	102
Pantropical spotted dolphin	570
Striped dolphin	172
Rough-toothed dolphin	15
Fraser's dolphin	127

Sea of Japan—Operational Area 5 2 Missions	
Animal	Requested Take Authorization Level B harassment
Fin whale	44
Bryde's whale	5
Minke whale	16
Minke whale J stock	6
Gray whale	0
N. Pacific right whale	1
Sperm whale	41
Stejneger's beaked whale	80
Baird's beaked whale	18
Cuvier's beaked whale	245
Ginkgo-toothed beaked whale	30
False killer whale	161
Melon-headed whale	0
Short-finned pilot whale	33
Risso's dolphin	350
Common dolphin	3615
Bottlenose dolphin	32
Spinner dolphin	0
Pantropical spotted dolphin	285
Pacific white-sided dolphin	94
Dall's porpoise	1412

East China Sea—Operational Area 6	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Fin whale	4
Bryde's whale	9
Minke whale	58
Minke whale J stock	24
Gray whale (winter only)	1
N. Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Cuvier's beaked whale	64
Blainville's beaked whale	13
Ginkgo-toothed beaked whale	5
False killer whale	17
Pygmy killer whale	4
Melon-headed whale	63
Short-finned pilot whale	27
Risso's dolphin	150
Common dolphin	658
Bottlenose dolphin	106
Spinner dolphin	0
Pantropical spotted dolphin	154
Striped dolphin	172
Rough-toothed dolphin	73
Fraser's dolphin	67
Pacific white-sided dolphin	0

South China Sea—Operational Area 7	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Fin whale	4
Bryde's whale	9
Minke whale	43
Gray whale (winter only)	1
North Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Cuvier's beaked whale	0
Blainville's beaked whale	7
Ginkgo-toothed beaked whale	7
False killer whale	19
Pygmy killer whale	4
Melon-headed whale	70
Short-finned pilot whale	22
Risso's dolphin	175
Common dolphin	658
Bottlenose dolphin	85
Spinner dolphin	3249
Pantropical spotted dolphin	132
Striped dolphin	172
Rough-toothed dolphin	73
Fraser's dolphin	67

Offshore Japan 25-40° N—Operational Area 8	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Blue whale	11
Fin whale	5
Sei whale	15
Bryde's whale	21
Minke whale	13
Sperm whale	11
<i>Kogia</i> spp.	211
Baird's beaked whale	3
Cuvier's beaked whale	37
<i>Mesoplodon</i> spp.	16
False killer whale	117
Pygmy killer whale	7
Melon-headed whale	41
Short-finned pilot whale	0
Risso's dolphin	34
Common dolphin	3615
Bottlenose dolphin	17
Spinner dolphin	0
Pantropical spotted dolphin	307
Striped dolphin	856
Rough-toothed dolphin	15
Pacific white-sided dolphin	102
Hawaiian monk seal	1

Offshore Japan 10-25° N—Operational Area 9

1 Mission

Animal	Requested Take Authorization Level B harassment
Bryde's whale	9
Sperm whale	0
<i>Kogia</i> spp.	0
Cuvier's beaked whale	19
False killer whale	34
Melon-headed whale	19
Short-finned pilot whale	22
Risso's dolphin	42
Common dolphin	1,644
Bottlenose dolphin	17
Spinner dolphin	102
Pantropical spotted dolphin	395
Striped dolphin	172
Rough-toothed dolphin	0

Hawaii North—Operational Area 10
2 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	8
Fin whale	6
Bryde's whale	12
Minke whale	8
Humpback whale	91
Sperm whale	73
<i>Kogia</i> spp.	506
Cuvier's beaked whale	205
Blainville's beaked whale	39
Longman's beaked whale	14
Killer whale	6
False killer whale (Hawaii Pelagic)	9
False killer whale (Hawaii Insular)	9
Pygmy killer whale	17
Melon-headed whale	51
Short-finned pilot whale	66
Risso's dolphin	44
Bottlenose dolphin (Hawaii Pelagic)	193
Bottlenose dolphin (Kauai/Niihau)	1
Spinner dolphin	16
Pantropical spotted dolphin	43
Striped dolphin	62
Rough-toothed dolphin	164
Fraser's dolphin	156
Hawaiian monk seal	4

Hawaii South—Operational Area 11	
2 Missions	
Animal	Requested Take Authorization Level B harassment
Blue whale	4
Fin whale	3
Bryde's whale	6
Minke whale	6
Humpback whale	0
Sperm whale	48
<i>Kogia</i> spp.	257
Cuvier's beaked whale	122
Blainville's beaked whale	23
Longman's beaked whale	8
Killer whale	3
False killer whale (Hawaii Pelagic)	5
False killer whale (Hawaii Insular)	5
Pygmy killer whale	9
Melon-headed whale	27
Short-finned pilot whale	63
Risso's dolphin	23
Bottlenose dolphin (Hawaii Pelagic)	25
Bottlenose dolphin (Oahu)	1
Bottlenose dolphin (4-Island)	1
Bottlenose dolphin	3
Spinner dolphin	20
Pantropical spotted dolphin	53
Striped dolphin	78
Rough-toothed dolphin	87
Fraser's dolphin	83
Hawaiian monk seal	3



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

LETTER OF AUTHORIZATION

The Chief of Naval Operations, Department of the Navy, 2000 Navy Pentagon, Washington, D.C. 20350-2000, and persons operating under his authority (i.e., Navy), are authorized to take marine mammals incidental to Navy operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar in accordance with 50 CFR Part 218, Subpart X—Taking of Marine Mammals Incidental to Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar subject to the provisions of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*; MMPA) and the following conditions:

1. This Authorization is valid for the period August 15, 2012, through August 14, 2013.
2. This Authorization is valid only for the unintentional taking of the species of marine mammals identified in 50 CFR § 218.230(b) and Condition 5 of this Authorization governing the taking of these animals incidental to the activity specified in Condition 3. This authorization shall be valid only for take consistent with the provisions in 50 CFR § 218.232 and the terms of this Authorization as specified in this Authorization.
3. This Authorization is valid only for activities associated with the operation of the SURTASS LFA Sonar onboard the United States Naval Ship (USNS) VICTORIOUS (T-AGOS 19). The signals transmitted by the SURTASS LFA sonar source must be between 100 and 500 Hertz (Hz) with a source level for each of the 18 projectors at no more than 215 decibels (dB) re: 1 micro Pascal (μPa) at 1 meter (m) root mean square (rms)) with a maximum duty cycle of 20 percent.
4. This Authorization, combined with Authorizations for the USNS ABLE (T-AGOS 20), USNS EFFECTIVE (T-AGOS 21), and USNS IMPECCABLE (T-AGOS 23), is valid for an estimated total of 20 nominal active sonar missions among the four SURTASS LFA sonar vessels (or equivalent shorter missions but not to exceed a total of 432 hours of transmit time per vessel during the period of effectiveness of this Authorization) within the following areas:
 - (a) Up to 16 nominal missions in the northwestern Pacific Ocean which includes the following operational areas: east of Japan; the North Philippine Sea; the west Philippine Sea; offshore Guam; the Sea of Japan; the East China Sea; the South China Sea; and offshore Japan (25° to 40° N and 10° to 25° N).

USNS VICTORIOUS



- (b) Up to 4 nominal missions in the Hawaii Range Complex which includes the northern and southern Hawaii operational areas.

SPECIES AUTHORIZED AND LEVEL OF TAKE

5. The incidental take of marine mammals under the activity identified in Conditions 3 and 4 of this Authorization is limited to the following species:
- (a) **Mysticetes:** blue whale (*Balaenoptera musculus*), Bryde's whale (*Balaenoptera edeni*), fin whale (*Balaenoptera physalus*), gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*), minke whale (*Balaenoptera acutorostrata*), northern Pacific right whale (*Eubalena japonica*), pygmy right whale (*Capera marginata*), sei whale (*Balaenoptera borealis*), and southern right whale (*Eubalaena australis*).
- (b) **Odontocetes:** Baird's beaked whale (*Berardius bairdii*), Blainville's beaked whale (*Mesoplodon densirostris*), common bottlenose dolphin (*Tursiops truncatus*), Cuvier's beaked whale (*Ziphius cavirostris*), Dall's porpoise (*Phocoenoides dalli*), dwarf sperm and pygmy sperm whales (*Kogia simus* and *K. breviceps*), false killer whale (includes Hawaii pelagic and insular stocks) (*Pseudorca crassidens*), Fraser's dolphin (*Lagenodelphis hosei*), Gervais' beaked whale (*Mesoplodon europaeus*), ginkgo-toothed beaked whale (*Mesoplodon ginkgodens*), Gray's beaked whale (*Mesoplodon grayi*), Hector's beaked whale (*Mesoplodon hectori*), Hubbs' beaked whale (*Mesoplodon carhubbsi*), Indo-Pacific bottlenose dolphin (*Tursiops aduncus*), killer whale (*Orca orcinus*), long-beaked common dolphin (*Delphinus capensis*), Longman's beaked whale (*Indopacetus pacificus*), melon-headed whale (*Peponocephala electra*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), pantropical spotted dolphin (*Stenella attenuata*), Perrin's beaked whale (*Mesoplodon perrini*), pygmy beaked whale (*Mesoplodon peruvianus*), pygmy killer whale (*Feresa attenuata*), Risso's dolphin (*Grampus griseus*), rough-toothed dolphin (*Steno bredanensis*), short-beaked common dolphin (*Delphinus delphis*), short-finned pilot whale (*Globicephala macrorhynchus*), Sowerby's beaked whale (*Mesoplodon bidens*), spade-toothed beaked whale (*Mesoplodon traversii*), sperm whale (*Physeter macrocephalus*), spinner dolphin (*Stenella longirostris*), Stejneger's beaked whale (*Mesoplodon stejnegeri*), strap-toothed beaked whale (*Mesoplodon layardii*), striped dolphin (*Stenella coeruleoalba*), and True's beaked whale (*Mesoplodon mirus*).
- (c) **Pinnipeds:** Hawaiian monk seal (*Monachus shauinslandi*)
6. The taking of marine mammals by the Holder of this Authorization is limited to the incidental taking of marine mammal species identified in Condition 5 by Level A and Level B harassment (as defined in the MMPA and 50 CFR § 216.3) within those areas authorized under Condition 4. The take, by harassment, that occurs during the year covered by this Authorization may not exceed the amount identified in Attachment 2.
7. Taking of marine mammal species not listed under Condition 5 by harassment, injury, or mortality, or the taking by mortality of any marine mammal species listed under Condition 5 is prohibited.

MITIGATION

8. The Holder of this Authorization, and any individuals operating under his authority, must conduct the activity identified in 50 CFR § 218.230 and Condition 3 of this Authorization in a manner that minimizes, to the greatest extent practicable, adverse impacts on marine mammals, their habitats, and the availability of marine mammals for subsistence. When conducting operations identified in 50 CFR § 218.230, the following mitigation measures must be implemented:
 - (a) The Holder of this Authorization, and any individuals operating under his authority, must not broadcast the SURTASS LFA sonar signal at a frequency greater than 500 Hz.
 - (b) Through mitigation described under 50 CFR § 218.234 and Condition 9 (Mitigation Monitoring) of this Authorization, the Holder of this Authorization and any individuals operating under his authority must ensure, to the greatest extent practicable, that no marine mammal is subjected to a sound pressure level of 180 dB re: 1 μ Pa (rms) or greater.
 - (c) **LFA Sonar Mitigation Zone:** Prior to commencing and during SURTASS LFA sonar transmissions, the Holder of this Authorization will use near-real-time environmental data and underwater acoustic prediction models to determine the propagation of the SURTASS LFA sonar signals in the operating area. The Holder must determine the distance from the SURTASS LFA sonar source to the 180-dB re: 1 μ Pa isopleth (rms) (i.e., the LFA sonar mitigation zone) in order to comply with Condition 8(b).
 - (i) The Holder will update these sound field estimates every 12 hours, or more frequently when meteorological or oceanographic conditions change.
 - (d) **Additional 1-km Buffer Zone:** The Holder of this Authorization will establish a one-kilometer (1-km) buffer zone around the LFA sonar mitigation zone.
 - (e) **Ramp-Up Procedures for the HF/M3 System:** The Holder of a Letter of Authorization will ramp up the High Frequency / Marine Mammal Monitoring (HF/M3) active sonar referenced in 50 CFR § 218.234 from a power level beginning at a maximum source sound pressure level of 180 dB re: 1 μ Pa (rms) in 10-dB increments to operating levels over a period of no less than five minutes:
 - (i) At least 30 minutes prior to any SURTASS LFA sonar transmission;
 - (ii) Prior to any SURTASS LFA sonar calibrations or testing that are not part of regular SURTASS LFA sonar transmissions described in 50 CFR § 218.230; and
 - (iii) Anytime after the Holder of this Authorization has powered-down the HF/M3 active sonar source for more than two minutes.
 - (iv) The Holder of a Letter of Authorization will not increase the HF/M3 active sonar system's sound pressure level once they detect a marine mammal. The Holder may resume a ramp-up of the HF/M3 sonar system once marine mammals are no longer detected by the HF/M3 active sonar system, passive acoustic monitoring, or visual monitoring described in Condition 9.

- (f) **Suspension/Delay for SURTASS LFA Sonar Transmissions:** If the Holder of this Authorization detects a marine mammal through monitoring required under 50 CFR § 218.235 and Condition 9 within either the LFA sonar mitigation zone or the 1-km buffer zone around the surveillance vessel, the Holder will immediately suspend or delay SURTASS LFA transmissions.
- (g) **Resumption of SURTASS LFA Sonar Transmissions:** The Holder of this Authorization may resume/commence SURTASS LFA sonar transmissions 15 minutes after:
- (i) All marine mammals have left the LFA sonar mitigation zone and the 1-km buffer zone around the surveillance vessel; and
 - (ii) There is no further detection of any marine mammal within the LFA sonar mitigation zone plus the 1-km buffer zone as determined by the visual, passive or active acoustic monitoring protocols described in 50 CFR § 218.235 and Condition 9.
- (h) **Geographic Restrictions:** The Holder of this Authorization will not operate SURTASS LFA sonar such that the SURTASS LFA sonar sound field exceeds 180 dB re: 1 μ Pa (rms):
- (i) At a distance of less than or equal to 22 km (14 miles (mi); 22 nautical miles (nm)) from any coastline, including offshore islands.
 - (ii) At a distance of less than or equal to 1 km (0.62 mi; 0.54 nm) seaward of the outer perimeter of any offshore biologically important area for marine mammals designated in 50 CFR § 218.234(f)(2) and described in Condition 8(h)(iii) during the period specified.
 - (iii) The Offshore Biologically Important Areas (OBIA) for marine mammals (with specified periods) for SURTASS LFA sonar operations are:

OBIA	Period of Effectiveness
Georges Bank	Year-round
Roseway Basin Right Whale Conservation Area	June through December, annually
Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS)	January 1 to November 14, annually
Southeastern U.S. Right Whale Seasonal Habitat	November 15 to April 15, annually
North Pacific Right Whale Critical Habitat	March through August, annually
Silver Bank and Navidad Bank	December through April, annually
Coastal waters of Gabon, Congo and Equatorial Guinea	June through October, annually
Patagonian Shelf Break	Year-round
Southern Right Whale Seasonal Habitat	May through December, annually
Central California NMSs	June through November, annually
Antarctic Convergence Zone	October through March, annually

Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk	June through November, annually
Coastal waters off Madagascar	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
Madagascar Plateau, Madagascar Ridge, and Walters Shoal	November through December, annually
Ligurian-Corsican-Provencal Basin and Western Pelagos Sanctuary in the Mediterranean Sea	July to August, annually
Hawaiian Islands Humpback Whale NMS and Penguin Bank	November through April, annually
Costa Rica Dome	Year-round
Great Barrier Reef Between 16° S and 21° S	May through September, annually
Bonney Upwelling on the southern coast of Australia	December through May, annually
Northern Bay of Bengal and Head of Swatch-of-No-Ground	Year-round
Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon	Olympic NMS: December, January, March, and May, annually The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually
Abrolhos Bank	August through November

Note: See § 218.234(f)(2) and Attachment 1 for coordinate information.

- (i) **Operational Exception for SURTASS LFA Sound Field in OBIAs:** During military operations, SURTASS LFA sonar transmissions may exceed 180 dB re: 1 μ Pa (rms) within the boundaries of an OBIA, including operating within an OBIA, when the Holder of this Authorization determines that it is: 1) operationally necessary to continue tracking an existing underwater contact; or 2) operationally necessary to detect a new underwater contact within the OBIA. This exception does not apply to routine training and testing with the SURTASS LFA sonar systems.
- (j) **Mission Planning:** The Holder of this Authorization must maintain a running calculation/estimation of takes of each species over the effective period of these regulations. The Holder of this Authorization will plan all SURTASS LFA sonar missions to ensure that no more than 12 percent of any marine mammal stock listed in 50 CFR § 218.230(b)(1) through (3) would be taken by Level B harassment annually. This annual per-stock cap of 12 percent applies regardless of the number of LFA sonar vessels operating. The Holder of this Authorization must coordinate with the Holder of the Letters of Authorization issued to the USNS ABLE, USNS EFFECTIVE, and the USNS IMPECCABLE, to ensure that this condition is met for all vessels combined.

MITIGATION MONITORING

9. The Holder of this Authorization, and any individuals operating under his authority, must:
 - (a) Perform the following for visual mitigation monitoring:
 - (i) Marine mammal biologists qualified in conducting at-sea marine mammal visual monitoring from surface vessels will train and qualify designated ship personnel as lookouts to conduct at-sea visual monitoring.
 - (ii) Train the lookouts in the most effective means to ensure quick and effective communication within the command structure in order to facilitate implementation of protective measures if they spot marine mammals.
 - (iii) Conduct visual monitoring from the ship's bridge during daylight hours (30 minutes before sunrise until 30 minutes after sunset) during operations that employ SURTASS LFA sonar in the active mode. Maintain a topside watch with standard binoculars (7x) and with the naked eye.
 - (b) Perform the following for passive acoustic monitoring:
 - (i) Use the low frequency, passive SURTASS sonar system to listen for vocalizing marine mammals; and
 - (c) Perform the following for active acoustic monitoring:
 - (i) Use the HF/M3 active sonar to locate and track marine mammals in relation to the SURTASS LFA sonar vessel and the sound field produced by the SURTASS LFA sonar source array, subject to the ramp-up requirements in § 218.234(e) and Condition 8(e).
10. Mitigation monitoring under Conditions 9(a), (b), and (c) must:
 - (a) Commence at least 30 minutes before the first SURTASS LFA sonar transmission (30 minutes before sunrise for visual monitoring);
 - (b) Continue between transmission pings; and
 - (c) Continue for at least 15 minutes after completion of the SURTASS LFA sonar transmission exercise (30 minutes after sunset for visual monitoring), or if marine mammals are showing abnormal behavioral patterns, for a period of time until behavior patterns return to normal or conditions prevent continued observations.

MONITORING

11. The Holder of this Authorization for activities described in 50 CFR § 218.230 must:
 - (a) Cooperate with the NMFS and any other federal agency for monitoring the impacts of the activity on marine mammals; and
 - (b) Designate qualified on-site individuals to conduct the mitigation, monitoring and reporting activities specified in this Letter of Authorization.

12. The Holder of this Authorization will conduct all monitoring required under the Letter of Authorization to increase knowledge of the affected marine mammal species. The Holder of this Authorization must:
- (a) Convene a Scientific Advisory Group (SAG) to analyze different types of monitoring/research that could increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises.
 - (b) Continue to assess data from the Marine Mammal Monitoring Program and work toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances. Any portions of the analyses conducted by these scientists based on these data that are determined to be unclassified after appropriate security reviews will be made publically available.
 - (c) Continue to explore the feasibility of coordinating with other fleet assets and/or range monitoring programs to include the use of SURTASS LFA sonar towed horizontal line arrays to augment the collection of marine mammal vocalizations before, during, and after designated exercises.
 - (d) Continue to collect ambient noise data and explore the feasibility of declassifying and archiving the ambient noise data for incorporation into appropriate ocean noise budget efforts.

REPORTING

13. The Holder of this Authorization must:

- (a) Provide a status update to the NMFS when the Holder submits the next annual application on efforts to assess the data collected by its undersea arrays and progress toward making some portion of that data, after appropriate security reviews, available to scientists with appropriate clearances.
- (b) Draft a plan of action outlining a strategy for implementing the Scientific Advisory Group's (SAG) recommendations for going forward with beaked whale and/or harbor porpoise research; or describe in writing why such research is not feasible/or is unlikely to increase the understanding of the potential effects of low-frequency active sonar transmissions on beaked whales and/or harbor porpoises, to be followed by a meeting with NMFS to discuss any other potential options.
- (c) Systematically observe SURTASS LFA sonar operations for injured or disabled marine mammals and monitor the principal marine mammal stranding networks and other media to correlate analysis of any whale strandings that could potentially be associated with SURTASS LFA sonar operations.
 - (i) The Holder will ensure that the NMFS is notified immediately or as soon as clearance procedures allow if an injured, stranded, or dead marine mammal is found during or shortly after, and in the vicinity of, any SURTASS LFA operations. The Holder will report the incident to the Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Jeannine.Cody@noaa.gov.

- (ii) The Holder will provide the NMFS with species or description of the animal(s), the condition of the animal(s) (including carcass condition if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available).
 - (iii) In the event that an injured, stranded, or dead marine mammal is found by the Holder that is not in the vicinity of, or found during or shortly after SURTASS LFA sonar operations, the Holder will report the same information to NMFS as listed above as soon as operationally feasible and clearance procedures allow.
- (d) In the event of a ship strike by the SURTASS LFA sonar vessel, at any time or place, the Holder must:
- (i) Immediately, or as soon as clearance procedures allow, report to the NMFS the species identification (if known), location (lat/long) of the animal (or the strike if the animal has disappeared), and whether the animal is alive or dead (or unknown);
 - (ii) Report the incident to the Incidental Take Program Supervisor, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to Jolie.Harrison@noaa.gov and Jeannine.Cody@noaa.gov;
 - (iii) Report to the NMFS as soon as operationally feasible the size and length of the animal, an estimate of the injury status (e.g., dead, injured but alive, injured and moving, unknown, etc.), vessel class/type and operational status;
 - (iv) Report to the NMFS the vessel length, speed, and heading as soon as feasible; and
 - (v) Provide the NMFS a photo or video, if equipment is available.
- (e) Submit classified and unclassified quarterly mission reports to the Director, Office of Protected Resources, NMFS, no later than 30 days after the end of each quarter beginning on the date of effectiveness of a Letter of Authorization or as specified in the appropriate Letter of Authorization. Each quarterly mission report will include all active-mode missions completed during that quarter. At a minimum, each classified mission report must contain the following information:
- (i) Dates, times, and location of each vessel during each mission;
 - (ii) Information on sonar transmissions during each mission and records of any delays or suspensions;
 - (iii) Location of the SURTASS LFA sonar mitigation and buffer zones in relation to the LFA sonar array;
 - (iv) Marine mammal observations including animal type and/or species, number of animals sighted, date and time of observations, type of detection (visual, passive acoustic, HF/M3 sonar), bearing and range from vessel, abnormal behavior (if any), and remarks/narrative (as necessary).
 - (v) The report will include the Navy's estimates of the percentages of marine mammal stocks affected (both for the quarter and cumulatively for the year

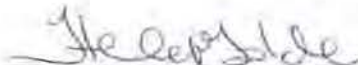
covered by the Authorization) by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on operating locations, dates/times of operations, system characteristics, oceanographic environmental conditions, and animal demographics.

- (vi) In the event that no SURTASS LFA sonar missions are completed during a quarter, a report of negative activity will be provided.
- (f) Submit an annual, unclassified report to the Director, Office of Protected Resources, NMFS, no later than 45 days after expiration of this Authorization. At a minimum, the annual report will contain the following:
- (i) An unclassified summary of the year's quarterly reports;
 - (ii) The Navy's estimates of the percentages of marine mammal stocks affected by SURTASS LFA sonar operations (both within and outside the LFA sonar mitigation zone), using predictive modeling based on operating locations, dates/times of operations, system characteristics, oceanographic environmental conditions, and animal demographics.
 - (iii) An analysis of the effectiveness of the mitigation measures with recommendations for improvements where applicable;
 - (iv) An assessment of any long-term effects from SURTASS LFA sonar operations; and
 - (v) Any discernible or estimated cumulative impacts from SURTASS LFA sonar operations.

14. The Holder of this Authorization must comply with the Terms and Conditions of the Incidental Take Statement corresponding to the Endangered Species Act Biological Opinion issued to the Navy and the National Marine Fisheries Service's Office of Protected Resources, Permits and Conservation Division.

15. A copy of this Authorization must be in the possession of the Officer in Charge of the Military Detachment (MILDET) on board the USNS VICTORIOUS in order to conduct the activity under the authority of this Letter of Authorization and Incidental Take Statement.

AUG 15 2012



Helen M. Golde, Acting Director
Office of Protected Resources
National Marine Fisheries Service

Date

Attachment 1 – Table 1 OBIA Coordinates

Name of Area	Location of Area	Months of Importance
Georges Bank	40°00'N, 72°30'W 39°37'N, 72°09'W 39°54'N, 71°43'W 40°02'N, 71°20'W 40°08'N, 71°01'W 40°04'N, 70°44'W 40°00'N, 69°24'W 40°16'N, 68°27'W 40°34'N, 67°13'W 41°00'N, 66°24'W 41°52'N, 65°47'W 42°20'N, 66°06'W 42°18'N, 67°23'W	Year-round
Roseway Basin Right Whale Conservation Area	43°05'N, 65°40'W 43°05'N, 65°03'W 42°45'N, 65°40'W 42°45'N, 65°03'W	June through December, annually
Great South Channel, U.S. Gulf of Maine, and Stellwagen Bank National Marine Sanctuary (NMS)	41°00.000'N, 69°05.000'W 42°09.000'N, 67°08.400'W 42°53.436'N, 67°43.873'W 44°12.541'N, 67°16.847'W 44°14.911'N, 67°08.936'W 44°21.538'N, 67°03.663'W 44°26.736'N, 67°09.596'W 44°16.805'N, 67°27.394'W 44°11.118'N, 67°56.398'W 43°59.240'N, 68°08.263'W 43°36.800'N, 68°46.496'W 43°33.925'N, 69°19.455'W 43°32.008'N, 69°44.504'W 43°21.922'N, 70°06.257'W 43°04.084'N, 70°21.418'W 42°51.982'N, 70°31.965'W 42°45.187'N, 70°23.396'W 42°39.068'N, 70°30.188'W 42°32.892'N, 70°35.873'W 42°07.748'N, 70°28.257'W 42°05.592'N, 70°02.136'W 42°03.664'N, 69°44.000'W 41°40.000'N, 69°45.000'W	January 1 to November 14, annually
Southeastern U.S. Right Whale Seasonal Habitat	Critical Habitat Boundaries are coastal waters between 31°15' N and 30°15'N from the coast out 15 nautical miles (nmi); and the coastal waters between 30°15' N and 28°00'N from the coast out 5 nmi. (50 CFR §226.13(c)) OBIA Boundaries are coastal waters between 31°15'N and 30°15'N from 12 to 15 nmi.	November 15 to April 15, annually
North Pacific Right Whale Critical Habitat	57°03'N, 153°00'W 57°18'N, 151°30'W 57°00'N, 151°30'W 56°45'N, 153°00'W (50 CFR §226.215)	March through August, annually

Name of Area	Location of Area	Months of Importance
Silver Bank and Navidad Bank	Silver Bank: 20° 38.899'N, 69° 23.640'W 20° 55.706'N, 69° 57.984'W 20° 25.221'N, 70° 00.387'W 20° 12.833'N, 69° 40.604'W 20° 13.918'N, 69° 31.518'W 20° 28.680'N, 69° 31.900'W Navidad Bank: 20° 15.596'N, 68° 47.967'W 20° 11.971'N, 68° 54.810'W 19° 52.514'N, 69° 00.443'W 19° 54.957'N, 68° 51.430'W 19° 51.513'N, 68° 41.399'W	December through April, annually
Coastal waters of Gabon, Congo and Equatorial Guinea	An exclusion zone following the 500-m isobath extending from 3°31.055'N, 9°12.226'E in the north offshore of Malabo southward to 8°57.470'S, 12°55.873'E offshore of Luanda.	June through October, annually
Patagonian Shelf Break	Between 200- and 2000-m isobaths and the following latitudes: 35°00'S, 39°00'S, 40°40'S, 42°30'S, 46°00'S, 48°50'S.	Year-round
Southern Right Whale Seasonal Habitat	Coastal waters between 42°00'S and 43°00'S from 12 to 15 nmi including the enclosed bays of Golfo Nuevo, Golfo San Jose, and San Matias. Golfos San Jose and San Nuevo are within 22 km (14 mi; 12 nmi) coastal exclusion zone.	May through December, annually
Central California National Marine Sanctuaries	Single stratum boundary created from the Cordell Bank (15 CFR 922.10), Gulf of the Farallones (15 CFR 922.80), and Monterey Bay (15 CFR 922.30) NMS legal boundaries. Monterey Bay NMS includes the Davidson Seamount Management Zone.	June through November, annually
Antarctic Convergence Zone	30°E to 80°E, 45°S 80°E to 150°E, 55°S 150°E to 50°W, 60°S 50°W to 30°E, 50°S	October through March, annually

Name of Area	Location of Area	Months of Importance
Piltun and Chayvo offshore feeding grounds in the Sea of Okhotsk	54°09.436'N, 143°47.408'W 54°09.436'N, 143°17.354'W 54°01.161'N, 143°17.354'W 53°53.580'N, 143°13.398'W 53°26.963'N, 143°28.230'W 53°07.013'N, 143°35.481'W 52°48.705'N, 143°38.447'W 52°32.077'N, 143°37.788'W 52°21.605'N, 143°34.163'W 52°09.470'N, 143°26.582'W 51°57.686'N, 143°30.208'W 51°36.033'N, 143°42.794'W 51°08.082'N, 143°51.301'W 51°08.082'N, 144°16.742'W 51°24.514'N, 144°11.139'W 51°48.116'N, 144°10.809'W 52°03.194'N, 144°20.363'W 52°23.235'N, 144°10.150'W 52°28.674'N, 144°12.787'W 52°42.523'N, 144°10.150'W 53°12.972'N, 143°55.648'W 53°18.505'N, 143°56.637'W 53°23.041'N, 143°53.011'W 53°28.250'N, 143°53.341'W 53°44.039'N, 143°49.056'W 53°53.207'N, 143°50.045'W 53°59.819'N, 143°48.067'W	June through November, annually
Coastal waters off Madagascar	16°03'55.04"S, 50°27'12.59"E 16°12'23.03"S, 51°03'37.38"E 24°30'45.06"S, 48°26'00.94"E 24°15'28.07"S, 47°46'51.16"E 22°18'00.74"S, 48°14'13.52"E 20°52'24.12"S, 48°43'13.49"E 19°22'33.24"S, 49°15'45.47"E 18°29'46.08"S, 49°37'32.25"E 17°38'27.89"S, 49°44'27.17"E 17°24'39.12"S, 49°39'17.03"E 17°19'35.34"S, 49°54'23.82"E 16°45'41.71"S, 50°15'56.35"E	July through September, annually for humpback whale breeding and November through December, annually for migrating blue whales.
Madagascar Plateau, Madagascar Ridge, and Walters Shoal	25°55'20.00"S, 44°05'15.45"E 25°46'31.36"S, 47°22'35.90"E 27°02'37.71"S, 48°03'31.08"E 35°13'51.37"S, 46°26'19.98"E 35°14'28.59"S, 42°35'49.20"E 31°36'57.96"S, 42°37'49.35"E 27°41'11.21"S, 44°30'11.01"E	November through December, annually

Name of Area	Location of Area	Months of Importance
Ligurian-Corsican-Provencal Basin and Western Pelagos Sanctuary in the Mediterranean Sea	42°50.271'N, 06°31.883'E 42°55.603'N, 06°43.418'E 43°04.374'N, 06°52.165'E 43°12.600'N, 07°10.440'E 43°21.720'N, 07°19.380'E 43°30.600'N, 07°32.220'E 43°33.900'N, 07°49.920'E 43°36.420'N, 08°05.580'E 43°42.600'N, 08°22.140'E 43°50.880'N, 08°34.500'E 43°58.560'N, 08°47.700'E 43°59.040'N, 08°56.040'E 43°57.047'N, 09°03.540'E 43°52.260'N, 09°08.520'E 43°47.580'N, 09°13.500'E 43°36.060'N, 09°16.620'E 43°28.440'N, 09°05.820'E 43°21.360'N, 09°02.100'E 43°16.020'N, 08°57.240'E 43°04.440'N, 08°47.580'E 42°54.900'N, 08°35.400'E 42°45.900'N, 08°27.540'E 42°36.060'N, 08°22.020'E 42°22.620'N, 08°15.849'E 42°07.202'N, 08°17.174'E 41°52.800'N, 08°15.720'E 41°39.780'N, 08°05.280'E 41°28.200'N, 08°51.600'E 42°57.060'N, 06°19.860'E	July to August, annually
Hawaiian Islands Humpback Whale NMS and Penguin Bank	21°10'02.179"N, 157°30'58.217"W 21°09'46.815"N, 157°30'22.367"W 21°06'39.882"N, 157°31'00.778"W 21°02'51.976"N, 157°30'30.049"W 20°59'52.725"N, 157°29'28.591"W 20°58'05.174"N, 157°27'35.919"W 20°55'49.456"N, 157°30'58.217"W 20°50'44.729"N, 157°42'42.418"W 20°51'02.654"N, 157°44'45.333"W 20°53'56.784"N, 157°46'04.716"W 20°56'32.988"N, 157°45'33.987"W 21°01'27.472"N, 157°43'10.586"W 21°05'20.499"N, 157°39'27.802"W 21°10'02.179"N, 157°30'58.217"W	November through April, annually
Costa Rica Dome	Centered at 9°N and 88°W	Year-round

Name of Area	Location of Area	Months of Importance
Great Barrier Reef Between 16° S and 21° S	16°01.829'S, 145°38.783'E 15°52.215'S, 146°20.936'E 17°28.354'S, 146°59.392'E 20°16.228'S, 151°39.674'E 20°58.381'S, 150°30.897'E 20°17.007'S, 149°38.247'E 20°10.941'S, 149°18.247'E 20°02.403'S, 149°12.623'E 19°53.287'S, 149°03.986'E 19°49.866'S, 148°52.135'E 19°53.287'S, 148°44.302'E 19°47.965'S, 148°36.870'E 19°47.205'S, 148°26.024'E 19°19.978'S, 147°39.626'E 19°14.065'S, 147°37.014'E 19°08.913'S, 147°31.993'E 19°05.667'S, 147°24.160'E 19°07.576'S, 147°18.134'E 18°51.718'S, 146°51.219'E 18°44.258'S, 146°54.031'E 18°37.175'S, 146°51.420'E 18°31.620'S, 146°43.385'E 18°27.595'S, 146°40.573'E 17°36.676'S, 146°20.488'E 17°20.484'S, 146°16.671'E 17°07.745'S, 146°13.056'E 16°49.769'S, 146°11.047'E 16°41.835'S, 146°03.817'E 16°39.706'S, 145°54.979'E	May through September, annually
Bonney Upwelling on the west coast of Australia	37°12'20.036"S, 139°31'17.703"E 37°37'33.815"S, 139°42'42.508"E 38°10'36.144"S, 140°22'57.345"E 38°44'50.558"S, 141°33'50.342"E 39°07'04.125"S, 141°11'00.733"E 37°28'33.179"S, 139°10'52.263"E	December through May, annually
Northern Bay of Bengal and Head of Swatch-of-No-Ground	20°59.735'N, 89°07.675'E 20°55.494'N, 89°09.484'E 20°52.883'N, 89°12.704'E 20°55.275'N, 89°18.133'E 21°04.558'N, 89°25.294'E 21°12.655'N, 89°25.354'E 21°13.279'N, 89°16.833'E 21°06.347'N, 89°15.011'E	Year-round
Olympic Coast NMS and Prairie, Barkley Canyon, and Nitnat Canyon	Boundaries within 23 nmi (26.5 m; 42.6 km) of the coast from 47°07' N to 48°30' N latitude 48°30'01.995"N, 125°58'38.786"W 48°16'55.605"N, 125°38'52.052"W 48°23'07.353"N, 125°17'10.935"W 48°12'38.241"N, 125°16'42.339"W 47°58'20.361"N, 125°31'14.517"W 47°58'20.361"N, 126°06'16.322"W 48°09'46.665"N, 126°25'48.758"W	Olympic NMS: December, January, March, and May, annually The Prairie, Barkley Canyon, and Nitnat Canyon: June through September, annually

Name of Area	Location of Area	Months of Importance
Abrolhos Bank	16°35'34.909"38°52'30.455" 16°35'31.619"38°43'41.069" 16°40'00.131"37°23'52.492" 19°30'59.069"37°23'52.446" 19°30'59.974"39°33'38.351" 19°20'24.752"39°30'33.03" 18°52'16.884"39°32'31.789" 18°45'09.937"39°32'27.709" 18°30'59.345"39°30'59.669" 18°27'28.985"39°30'13.453" 18°17'30.429"39°26'21.073" 18°07'43.518"39°19'52.924" 18°09'24.931"39°16'24.913" 18°10'04.585"39°12'30.425" 18°10'20.682"38°39'06.185" 18°08'50.404"38°35'00.059" 18°06'05.466"38°31'41.385" 18°02'09.399"38°29'26.179" 17°58'01.372"38°28'45.409" 17°53'58.883"38°29'34.612" 16°48'58.768"38°55'23.768" 16°43'15.682"38°53'40.007"	August through November, annually

Attachment 2 – Authorized Take Estimates by Operating Region

The Holder of this Authorization must maintain a running calculation/estimation of takes of each species over the effective period of these regulations. The Holder of this Authorization must also coordinate with the Holder of the Letter of Authorization issued to the USNS EFFECTIVE, the USNS ABLE, and the USNS IMPECCABLE, to ensure that these conditions are met for all vessels combined.

Category	Requested Take Authorization Level A harassment
Mysticetes	No more than 6 over the course of the regulations.
Odontocetes	No more than 25 over the course of the regulations.
Pinnipeds	No more than 25 over the course of the regulations.

East of Japan—Operational Area 1	
1 Mission	
Animal	Requested Take Authorization Level B harassment
Blue whale	2
Fin whale	2
Sei whale	7
Bryde's whale	7
Minke whale	16
North Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Baird's beaked whale	21
Cuvier's beaked whale	37
Ginkgo-toothed beaked whale	5
Hubbs' beaked whale	5
False killer whale	32
Pygmy killer whale	19
Short-finned pilot whale	118
Risso's dolphin	92
Common dolphin	658
Bottlenose dolphin	136
Spinner dolphin	0
Pantropical spotted Dolphin	88
Striped dolphin	57
Rough-toothed dolphin	44
Fraser's dolphin	45
Pacific white-sided dolphin	94

North Philippine Sea—Operational Area 2	
3 Missions	
Animal	Requested Take Authorization Level B harassment
Bryde's whale	21
Minke whale	304
North Pacific right whale	1
Sperm whale	143
<i>Kogia</i> spp.	281
Cuvier's beaked whale	146
Blainville's beaked whale	14
Ginkgo-toothed beaked whale	14
Killer whale	14
False killer whale	107
Pygmy killer whale	76
Melon-headed whale	45
Short-finned pilot whale	826
Risso's dolphin	833
Common dolphin	1644
Bottlenose dolphin	271
Spinner dolphin	0
Pantropical spotted dolphin	570
Striped dolphin	1369
Rough-toothed dolphin	481
Fraser's dolphin	265
Pacific white-sided dolphin	466

West Philippine Sea—Operational Area 3

3 Missions

Animal	Requested Take Authorization Level B harassment
Fin whale	14
Bryde's whale	42
Minke whale	141
Humpback whale (winter only)	2
Sperm whale	31
<i>Kogia</i> spp.	106
Cuvier's beaked whale	10
Blainville's beaked whale	20
Ginkgo-toothed beaked whale	19
False killer whale	131
Pygmy killer whale	94
Melon-headed whale	56
Short-finned pilot whale	215
Risso's dolphin	575
Common dolphin	3287
Bottlenose dolphin	473
Spinner dolphin	0
Pantropical spotted dolphin	307
Striped dolphin	343
Rough-toothed dolphin	336
Fraser's dolphin	20
Pacific white-sided dolphin	559

Offshore Guam—Operational Area 4

3 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	3
Fin whale	11
Sei whale	9
Bryde's whale	13
Minke whale	8
Humpback whale (winter only)	580
Sperm whale	31
<i>Kogia</i> spp.	386
Cuvier's beaked whale	191
Blainville's beaked whale	36
Ginkgo-toothed beaked whale	16
Longman's beaked whale	13
False killer whale	36
Pygmy killer whale	4
Melon-headed whale	137
Killer whale	6
Short-finned pilot whale	54
Risso's dolphin	34
Common dolphin	0
Bottlenose dolphin	0
Spinner dolphin	102
Pantropical spotted dolphin	570
Striped dolphin	172
Rough-toothed dolphin	15
Fraser's dolphin	127

Sea of Japan—Operational Area 5

2 Missions

Animal	Requested Take Authorization Level B harassment
Fin whale	44
Bryde's whale	5
Minke whale	16
Minke whale J stock	6
Gray whale	0
N. Pacific right whale	1
Sperm whale	41
Stejneger's beaked whale	80
Baird's beaked whale	18
Cuvier's beaked whale	245
Ginkgo-toothed beaked whale	30
False killer whale	161
Melon-headed whale	0
Short-finned pilot whale	33
Risso's dolphin	350
Common dolphin	3615
Bottlenose dolphin	32
Spinner dolphin	0
Pantropical spotted dolphin	285
Pacific white-sided dolphin	94
Dall's porpoise	1412

East China Sea—Operational Area 6

1 Mission

Animal	Requested Take Authorization Level B harassment
Fin whale	4
Bryde's whale	9
Minke whale	58
Minke whale J stock	24
Gray whale (winter only)	1
N. Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Cuvier's beaked whale	64
Blainville's beaked whale	13
Ginkgo-toothed beaked whale	5
False killer whale	17
Pygmy killer whale	4
Melon-headed whale	63
Short-finned pilot whale	27
Risso's dolphin	150
Common dolphin	658
Bottlenose dolphin	106
Spinner dolphin	0
Pantropical spotted dolphin	154
Striped dolphin	172
Rough-toothed dolphin	73
Fraser's dolphin	67
Pacific white-sided dolphin	0

South China Sea—Operational Area 7

1 Mission

Animal	Requested Take Authorization Level B harassment
Fin whale	4
Bryde's whale	9
Minke whale	43
Gray whale (winter only)	1
North Pacific right whale	1
Sperm whale	11
<i>Kogia</i> spp.	36
Cuvier's beaked whale	0
Blainville's beaked whale	7
Ginkgo-toothed beaked whale	7
False killer whale	19
Pygmy killer whale	4
Melon-headed whale	70
Short-finned pilot whale	22
Risso's dolphin	175
Common dolphin	658
Bottlenose dolphin	85
Spinner dolphin	3249
Pantropical spotted dolphin	132
Striped dolphin	172
Rough-toothed dolphin	73
Fraser's dolphin	67

Offshore Japan 25-40° N—Operational Area 8

1 Mission

Animal	Requested Take Authorization Level B harassment
Blue whale	11
Fin whale	5
Sei whale	15
Bryde's whale	21
Minke whale	13
Sperm whale	11
<i>Kogia</i> spp.	211
Baird's beaked whale	3
Cuvier's beaked whale	37
<i>Mesoplodon</i> spp.	16
False killer whale	117
Pygmy killer whale	7
Melon-headed whale	41
Short-finned pilot whale	0
Risso's dolphin	34
Common dolphin	3615
Bottlenose dolphin	17
Spinner dolphin	0
Pantropical spotted dolphin	307
Striped dolphin	856
Rough-toothed dolphin	15
Pacific white-sided dolphin	102
Hawaiian monk seal	1

Offshore Japan 10-25° N—Operational Area 9

1 Mission

Animal	Requested Take Authorization Level B harassment
Bryde's whale	9
Sperm whale	0
<i>Kogia</i> spp.	0
Cuvier's beaked whale	19
False killer whale	34
Melon-headed whale	19
Short-finned pilot whale	22
Risso's dolphin	42
Common dolphin	1,644
Bottlenose dolphin	17
Spinner dolphin	102
Pantropical spotted dolphin	395
Striped dolphin	172
Rough-toothed dolphin	0

Hawaii North—Operational Area 10

2 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	8
Fin whale	6
Bryde's whale	12
Minke whale	8
Humpback whale	91
Sperm whale	73
<i>Kogia</i> spp.	506
Cuvier's beaked whale	205
Blainville's beaked whale	39
Longman's beaked whale	14
Killer whale	6
False killer whale (Hawaii Pelagic)	9
False killer whale (Hawaii Insular)	9
Pygmy killer whale	17
Melon-headed whale	51
Short-finned pilot whale	66
Risso's dolphin	44
Bottlenose dolphin (Hawaii Pelagic)	193
Bottlenose dolphin (Kauai/Niihau)	1
Spinner dolphin	16
Pantropical spotted dolphin	43
Striped dolphin	62
Rough-toothed dolphin	164
Fraser's dolphin	156
Hawaiian monk seal	4

Hawaii South—Operational Area 11

2 Missions

Animal	Requested Take Authorization Level B harassment
Blue whale	4
Fin whale	3
Bryde's whale	6
Minke whale	6
Humpback whale	0
Sperm whale	48
<i>Kogia</i> spp.	257
Cuvier's beaked whale	122
Blainville's beaked whale	23
Longman's beaked whale	8
Killer whale	3
False killer whale (Hawaii Pelagic)	5
False killer whale (Hawaii Insular)	5
Pygmy killer whale	9
Melon-headed whale	27
Short-finned pilot whale	63
Risso's dolphin	23
Bottlenose dolphin (Hawaii Pelagic)	25
Bottlenose dolphin (Oahu)	1
Bottlenose dolphin (4-Island)	1
Bottlenose dolphin	3
Spinner dolphin	20
Pantropical spotted dolphin	53
Striped dolphin	78
Rough-toothed dolphin	87
Fraser's dolphin	83
Hawaiian monk seal	3