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National Marine Fisheries Service
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Prepared by:

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In accordance with the Letters of Authorization
Under the MMPA and ITS authorization under
the ESA

09 November 2015

Annual Testing Report

09 November 2018 through 08 November 2019 Fourth Year

**For The U.S. Navy's
Northwest Training and Testing (NWTT)
Study Area**

07 February 2020

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NORTHWEST TRAINING AND TESTING ANNUAL TESTING REPORT

INTRODUCTION

The Naval Sea Systems Command prepared this Annual Testing Report covering the period from 09 November 2018 to 08 November 2019 in compliance with the National Marine Fisheries Service (NMFS) Final Rule under the Marine Mammal Protection Act (MMPA) for the Northwest Training and Testing (NWTT) Study Area.

In the NWTT Study Area Letters of Authorization “Requirements Annual Exercise and Testing Reports” are specified in paragraph 7(e).

The information in this Annual Testing Report represents the best practical data collection for this period.

(1) NWTT – Description of the Level of Testing Conducted in the NWTT Study Area during the Reporting Period

The level of testing within the NWTT study area was low. Use of all authorized sound sources was well within the amounts described and analyzed in the NWTT EIS/OEIS and the NWTT Letter of Authorization

(2) NWTT – Summary of Non-Impulsive and Impulsive Sources Used

(i) Total annual usage of each type of sound source

This section summarizes total annual usage of each type of sound source used within the NWTT study area.

Table 2-1. Testing sound source usage within the NWTT Study Area by source bin

| Authorized testing sound sources 50 CFR §218.144 | | Authorized Amount (09 Nov 18- 08 Nov 19) | Actual Usage (09 Nov 18- 08 Nov 19) | % Used of Authorized Amount |
|---|---|--|---|-----------------------------------|
| Active Acoustic Sources Used | | | | |
| LF4 | Low frequency sources from 180 dB up to 200 dB | 110 hours | * | * |
| LF5 | Low frequency sources from 160 dB up to 180 dB | 71 hours | * | * |
| MF1 | Hull-mounted sonars (e.g. SQS-53) | 32 hours | * | * |
| MF3 | Hull-mounted sonar (e.g. BQQ-10) | 145 hours | * | * |
| MF4 | Helicopter dipping sonar (e.g. AQS-13/22) | 10 hours | * | * |
| MF5 | Acoustic sonobuoys (e.g. SSQ-62) | 273 items | * | * |
| MF6 | Underwater sound signaling devices (e.g. MK 84 SUS) | 12 items | * | * |
| MF8 | Other active sources greater than 200dB | 40 hours | * | * |
| MF9 | Other active sources from 180 dB up to 200 dB | 1183 hours | * | * |
| MF10 | Other active sources from 160 dB up to 180 dB | 1156 hours | * | * |
| MF11 | Hull mounted surface ship sonar with an active duty cycle of greater than 80% | 34 hours | * | * |
| MF12 | High duty cycle towed array sonars (e.g. HDC-VDS) | 24 hours | * | * |
| HF1 | Hull-mounted submarine sonar (e.g. BQQ-10) | 161 hours | * | * |

| | | | | |
|------------------------|--|-----------------------------------|---|----|
| HF3 | Other hull-mounted submarine sonars | 145 hours | * | * |
| HF5 | Other active sources greater than 200dB | 360 hours | * | * |
| HF6 | Other active sources from 180 dB up to 200 dB | 2099 hours | * | * |
| VHF2 | Active sources with a frequency greater than 100 kHz, up to 200 kHz with a source level less than 200 dB | 35 hours | * | * |
| ASW1 | Mid-frequency Deep Water Active Distributed System (DWADS) | 16 hours | * | * |
| ASW2 | Mid-frequency Multi-static Active Coherent sonobuoy (e.g. SSQ-125) | 170 items | * | * |
| ASW2 | Mid-frequency Multi-static Active Coherent sonobuoy (e.g. SSQ-125) | 64 hours | * | * |
| ASW3 | Mid-frequency towed acoustic countermeasure (e.g. SLQ-25) | 444 hours | * | * |
| ASW4 | Mid-frequency expendable acoustic device countermeasure (e.g. MK 3) | 1182 devices | * | * |
| M3 | Mid-frequency acoustic modems (greater than 190 dB) | 1519 hours | | |
| TORP1 | Lightweight torpedo (e.g. MK 46,/MK 54) | 315 items | * | * |
| TORP2 | Heavyweight torpedo (e.g. MK48) | 299 items | * | * |
| SD1 | Swimmer detection sonars | 757 hours | * | * |
| SAS2 | HF SAS Systems | 798 hours | * | * |
| Explosive sources used | | | | |
| E3 | >0.5 lb to 2.5 lb NEW | 72 detonations | 0 | 0% |
| E4 | >2.5 lb to 5 lb NEW | 140 detonations (70 sonobuoys) | 0 | 0% |
| E8 | >60 lb to 100 lb NEW | 3 detonations | 0 | 0% |
| E11 | >500 lb to 650 lb NEW | 3 detonations | 0 | 0% |

*Information is presented in the classified version of this report.

(ii) Total 5-year cumulative usage of each type of sound source

This section summarizes total 5-year cumulative usage of each type of sound source used within the NWTT study area.

Table 2-2. 5-year cumulative testing sound source usage within the NWTT Study Area by source bin

| Sound Source Bin | Year 1 Actual Usage (09 Nov 15 - 08 Nov 16) | Year 2 Actual Usage (09 Nov 16 - 08 Nov 17) | Year 3 Actual Usage (09 Nov 17 - 08 Nov 18) | Year 4 Actual Usage (09 Nov 18 - 08 Nov 19) | 5-yr Authorized Amount (09 Nov 15- 08 Nov 20) | 5-yr Cumulative Actual Usage (09 Nov 15- 08 Nov 19) | % Used of 5-yr Authorized Amount |
|--|---|---|---|---|---|---|----------------------------------|
| Active Acoustic Sources Used During Annual Testing | | | | | | | |
| LF4 | * | * | * | * | 550 hours | * | * |
| LF5 | * | * | * | * | 355 hours | * | * |
| MF1 | * | * | * | * | 160 hours | * | * |
| MF3 | * | * | * | * | 725 hours | * | * |
| MF4 | * | * | * | * | 50 hours | * | * |
| MF5 | * | * | * | * | 1365 items | * | * |
| MF6 | * | * | * | * | 60 items | * | * |
| MF8 | * | * | * | * | 200 hours | * | * |
| MF9 | * | * | * | * | 5915 hours | * | * |

| | | | | | | | |
|------------------------|---|---|---|---|---------------------------------|---|----|
| MF10 | * | * | * | * | 5780 hours | * | * |
| MF11 | * | * | * | * | 170 hours | * | * |
| MF12 | * | * | * | * | 120 hours | * | * |
| HF1 | * | * | * | * | 805 hours | * | * |
| HF3 | * | * | * | * | 725 hours | * | * |
| HF5 | * | * | * | * | 1800 hours | * | * |
| HF6 | * | * | * | * | 10495 hours | * | * |
| ASW2 | * | * | * | * | 850 items | * | * |
| ASW2 | * | * | * | * | 320 hours | * | * |
| ASW3 | * | * | * | * | 2220 hours | * | * |
| ASW4 | * | * | * | * | 5910 items | * | * |
| M3 | * | * | * | * | 7595 hours | * | * |
| TORP1 | * | * | * | * | 1575 items | * | * |
| TORP2 | * | * | * | * | 1495 items | * | * |
| SD1 | * | * | * | * | 3785 hours | * | * |
| SAS2 | * | * | * | * | 3990 hours | * | * |
| Explosive Sources Used | | | | | | | |
| E3 | 0 | 0 | 0 | 0 | 360 detonations | 0 | 0% |
| E4 | 0 | 0 | 0 | 0 | 700 detonations (350 sonobuoys) | 0 | 0% |
| E8 | 0 | 0 | 0 | 0 | 15 detonations | 0 | 0% |
| E11 | 0 | 0 | 0 | 0 | 15 detonations | 0 | 0% |

*Information is presented in the classified version of this report.

(3) Annual Number of Explosive Testing Events Conducted

Table 3-1 Annual Number of Explosive Testing Events Conducted

| Type of Explosive Testing Events | Number of Testing Events |
|---|--------------------------|
| Anti-Submarine Warfare Tracking Tests – Marine Patrol Aircraft (MK61, MK64 and MK82) | 0 |

(4) Improved Extended Echo-Ranging System (IEER) Sonobuoy Testing

IEER sonobuoys (E4) were not used within the NWTT Study Area for testing.

(5) Special NWTT Reporting Areas for Mid-Frequency and High-Frequency Sonar Use

The use of Mid-Frequency and High-Frequency sonar within the boundaries of the Olympic Coast National Marine Sanctuary, the Humpback Whale Northern Washington Feeding Area, the Stonewall and Heceta Bank Feeding Area, and the Gray Whale Northern Puget Sound Feeding Area did not exceed annual authorized levels. Actual amounts of sonar use in these areas were provided to the National Marine Fisheries Service in the classified version of this report.