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National Marine Fisheries Service  
Office of Protected Resources

Prepared by:

Department of the Navy

In accordance with the Letters of Authorization  
Under the MMPA and ITS authorization under  
the ESA 09 November 2020

# **Annual Testing Report**

## **09 November 2020 through 08 November 2021 First Year**

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

**08 February 2022**

# TABLE OF CONTENTS

## ANNUAL NWTT TESTING REPORT

INTRODUCTION ..... 3

(1) NWTT – Description of the Level of Testing Conducted in the NWTT Study Area during the Reporting Period ..... 3

(2) NWTT – Summary of Non-Impulsive and Impulsive Sources Used..... 3

(3) Annual Number of Explosive Testing Testing Events Conducted ..... 6

(4) Special NWTT Reporting Areas for Mid-Frequency and High-Frequency Sonar Use ..... 6

# NORTHWEST TRAINING AND TESTING ANNUAL TESTING REPORT

## INTRODUCTION

The Naval Sea Systems Command prepared this Annual Testing Report covering the period from 09 November 2020 to 08 November 2021 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 Letter 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 19- 08 Nov 20)	Actual Usage (09 Nov 19- 08 Nov 20)	% Used of Authorized Amount
Active Acoustic Sources Used				
LF4	Low frequency sources from 180 dB up to 200 dB	117 hours	*	*
LF5	Low frequency sources from 160 dB up to 180 dB	0-18 hours	*	*
MF1	Hull-mounted surface ship sonars (e.g. AN/SQS-53C and AN/SQS-60)	20-169 hours	*	*
MF1K	Kingfisher mode associated with MF1 sonars	48 hours	*	*
MF2	Hull-mounted surface ship sonars (e.g., AN/SQS-56)	32 hours	*	*
MF3	Hull-mounted sonar (e.g. AN/BQQ-10)	34-36 hours	*	*
MF4	Helicopter dipping sonar (e.g. AN/AQS-22)	41-50 hours	*	*
MF5	Acoustic sonobuoys (e.g. DICASS)	300-673 items	*	*
MF6	Underwater sound signaling devices (e.g. MK 84)	60-232 items	*	*
MF9	Other active sources from 180 dB up to 200 dB	644-959 hours	*	*
MF10	Active sources (greater than 160 dB but less than 180 dB)	886 hours	*	*
MF11	Hull mounted surface ship sonar with an active duty cycle of greater than 80%	48 hours	*	*

MF12	High duty cycle towed array sonars (e.g. HDC-VDS)	100 hours	*	*
HF1	Hull-mounted submarine sonar (e.g. BQQ-10)	10 hours	*	*
HF3	Other hull-mounted submarine sonars	1-19 hours	*	*
HF4	Mine detection, classification, and neutralization sonar (e.g., AN/SQS-20)	1860-1868 hours	*	*
HF5	Other active sources greater than 200dB	352-400 hours	*	*
HF6	Other active sources from 180 dB up to 200 dB	1705-1865 hours	*	*
HF8	Hull-mounted surface ship sonars (e.g., AN/SSQS-61)	24 hours	*	*
HF9	Active sources which emulate the acoustic signals produced by lightweight torpedoes	257 hours	*	*
VHF1	Active sources with a frequency greater than 100 kHz, up to 200 kHz with a source level greater than 200 dB	320 hours	*	*
VHF2	Active sources with a frequency greater than 100 kHz, up to 200 kHz with a source level less than 200 dB	135 hours	*	*
ASW1	Mid-frequency systems operating above 200 dB	80 hours	*	*
ASW2	Mid-frequency Multi-static Active Coherent sonobuoy (e.g. SSQ-125)	240 items	*	*
ASW3	Mid-frequency towed acoustic countermeasure (e.g. AN/SLQ-25)	487-1015 hours	*	*
ASW4	Mid-frequency expendable acoustic device countermeasure (e.g. MK 3)	1349-1389 items	*	*
ASW5	Mid-frequency sonobouys with high duty cycles	80 hours	*	*
TORP1	Lightweight torpedo (e.g. MK 46,/MK 54, or Anti-Torpedo Torpedo)	298-360 items	*	*
TORP2	Heavyweight torpedo (e.g. MK48)	332-372 items	*	*
TORP3	Heavyweight torpedo (e.g. MK48)	6 items	*	*
FLS2	High-frequency sources with short pulse lengths, narrow beam widths, and focused beam patterns	24 hours	*	*
M3	Mid-frequency acoustic modems (greater than 190 dB)	1088 hours	*	*
SAS2	High-frequency SAS systems	1312 hours	*	*
BB1	Mid-frequency to high-frequency mine countermeasure sonar	48 hours	*	*
BB2	High-frequency to very high-frequency mine countermeasure sonar	48 hours	*	*
Explosive sources used				
E1	>0.1 lb to 0.25 lb NEW	8 detonations	0	0%
E3	>0.5 lb to 2.5 lb NEW	72 detonations	0	0%
E4	>2.5 lb to 5 lb NEW	36 detonations	0	0%
E7	>20-60 lb NEW	5 detonations	0	0%
E8	>60 lb to 100 lb NEW	4 detonations	0	0%
E11	>500 lb to 650 lb NEW	4 detonations	0	0%

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

**(ii) Total 7-year cumulative usage of each type of sound source**

This section summarizes total 7-year cumulative usage of each type of sound source used within the NWTT study area.

**Table 2-2. 7-year cumulative testing sound source usage within the NWTT Study Area by source bin**

Sound Source Bin	Year 1 Actual Usage (09 Nov20-08 Nov 21)	7-yr Authorized Amount (09 Nov 20-08 Nov 27)	7-yr Cumulative Actual Usage (09 Nov 20-08 Nov 27)	% Used of 7-yr Authorized Amount
Active Acoustic Sources Used				
LF4	*	1239 hours	*	*
LF5	*	23 hours	*	*
MF1	*	398 hours	*	*
MF1K	*	336 hours	*	*
MF2	*	224 hours	*	*
MF3	*	239 hours	*	*
MF4	*	298 hours	*	*
MF5	*	2782 items	*	*
MF6	*	744 items	*	*
MF9	*	5086 hours	*	*
MF10	*	6197 hours	*	*
MF11	*	336 hours	*	*
MF12	*	700 hours	*	*
HF1	*	68 hours	*	*
HF3	*	30 hours	*	*
HF4	*	11235 hours	*	*
HF5	*	2608 hours	*	*
HF6	*	12377 hours	*	*
HF8	*	168 hours	*	*
HF9	*	1772 hours	*	*
VHF1	*	2240 hours	*	*
VHF2	*	945 hours	*	*
ASW1	*	560 hours	*	*
ASW2	*	1680 items	*	*
ASW3	*	4091 hours	*	*
ASW4	*	9442 items	*	*
ASW5		560 hours		
TORP1	*	2258 items	*	*
TORP2	*	2324 items	*	*
TORP3	*	42 items	*	*
FLS2	*	168 hours	*	*
M3	*	7616 hours	*	*
SAS2	*	9184 hours	*	*
BB1	*	336 hours	*	*
BB2	*	336 hours	*	*
Explosive sources used				
E1	0	56 detonations	0	0%
E3	0	504 detonations	0	0%

E4	0	108 detonations	0	0%
E7	0	15 detonations	0	0%
E8	0	28 detonations	0	0%
E11	0	28 detonations	0	0%

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

### **(3) Annual Number of Explosive Testing Testing Events Conducted**

No explosive testing events were conducted during the annual reporting period.

### **(4) Special NWTT Reporting Areas for Mid-Frequency and High-Frequency Sonar Use**

- (i) No use of low-frequency, mid-frequency, and high frequency sonar occurred within the Olympic Coast National Marine Sanctuary
- (ii) No use of surface ship mid-frequency sonar occurred within the three combined areas: 20 nautical miles from shore in the Marine Species Coastal Mitigation Area, the Juan de Fuca Eddy Marine Species Mitigation Area, and the Olympic Coast National Marine Sanctuary Mitigation Area.
- (iii) No use of surface ship mid-frequency sonar occurred within the Stonewall and Heceta Bank Humpback Whale Mitigation Area from May 1 to November 30.
- (iv) No use of surface ship mid-frequency sonar occurred within the Point St. George Humpback Whale Mitigation Area from July 1 to November 30.