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In accordance with the Letters of Authorization
Under the MMPA and ITS authorization under
the ESA
31 July 2015

Annual Exercise Report

03 August 2017 through 02 August 2018
Third Year

For The U.S. Navy's
Mariana Islands Training and Testing (MITT)
Study Area

30 November 2018

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ANNUAL MITT EXERCISE REPORT

ANNUAL MARIANA ISLANDS TRAINING AND TESTING UNCLASSIFIED EXERCISE REPORT

INTRODUCTION

The U.S. Navy prepared this unclassified version of the Annual Report covering the period from 03 August 2017 to 02 August 2018. In compliance with the National Marine Fisheries Service (NMFS) Final Rule under the Marine Mammal Protection Act (MMPA) for the Mariana Islands Training and Testing (MITT) Study Area, a classified version of this report is also submitted to NMFS.

In the MITT Study Area Letter of Authorization[1] requirements for "Monitoring and Reporting", the following report subsections were specified. However, only unclassified information is present within this report:

(1) Major Training Exercises (MTE)/SINKEX

- (i) Reporting requirements for Coordinated and Strike Group Exercises and SINKEX
- (ii) Exercise information for each MTE
- (iii) Evaluation of mitigation effectiveness
- (iv) Exercise information for each SINKEX

(2) Summary of Sources Used

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

(3) Geographic Information Presentation

The information in this Annual Report represents the best practical data collection for this period. To provide accounting for the entire five-year period of the authorization, in the final annual report Navy will submit a five-year close-out table with final totals of authorized and actual usage.

[1]MITT: 7(e) of the Letter of Authorization, and 50 CFR §218.95(g)(1) through (g)(3)

(1) MITT – Major Training Exercises/SINKEX

(i) Reporting requirements for Coordinated and Strike Group Major Training Exercises and SINKEX

The MITT Study Area Letter of Authorization requires reporting for MTEs and Sinking Exercises (SINKEX) taking place during the reporting period. MTEs that occur in MITT include ***Joint Multi-Strike Group Exercise*** (Valiant Shield) and ***Joint Expeditionary Exercises***. The required reporting items for these exercises are detailed in sections 1-ii through 1-iv below.

(ii) Exercise information for each Major Training Exercise

Table 1-ii-1a. MTEs conducted in the MITT Study Area.

(A) Exercise designator	(B) Date that exercise began and ended	(C) Location	(D) Number of items or hours of each sound source bin used																							(E) Number and types of US vessels and aircraft participating								
			(i) LF4 (hours)	(ii) LF5 (hours)	(iii) LF6 (hours)	(iv) MF1 (hours)	(v) MF2 (hours)	(vi) MF3 (hours)	(vii) MF4 (hours)	(viii) MF5 (items)	(ix) MF6 (items)	(x) MF8 (hours)	(xi) MF9 (hours)	(xii) MF10 (hours)	(xiii) MF11 (hours)	(xiv) MF12 (hours)	(xv) HF1 (hours)	(xvi) HF4 (hours)	(xvii) HF5 (hours)	(xviii) HF6 (hours)	(xix) ASW1 (hours)	(xx) ASW2 (items)	(xxi) ASW3 (hours)	(xxii) ASW4 (items)	(xxiii) TORP1 (items)	(xxiv) TORP2 (items)	(xxv) M3 (hours)	(xxvi) SD1 (hours)	CG	DDG	FFG	LCS	MH-60R/SH-60F dipping helo	SH-60B non-dipping helo	Submarines	MPRA	Non-ASW surface ship
No major training exercises were conducted in the MITT study area during this reporting period.																																	

Table 1-ii-1b. MTEs conducted in the MITT Study Area (explosives).

(A) Exercise designator	(B) Date that exercise began and ended	(C) Location	(D) Number of impulsive source detonations										
			(i) E1	(ii) E2	(iii) E3	(iv) E4	(v) E5	(vi) E6	(vii) E8	(viii) E9	(ix) E10	(x) E11	(xi) E12
No major training exercises were conducted in the MITT study area during this reporting period.													

(ii) (F) Individual marine mammal sighting information for each sighting when mitigation occurred during each MTE

Table 1-ii-2. MITT MTE – Individual Marine Mammal Sighting Information:

(1) Date/time/location of sighting	(2) Species	(3) Number of individuals	(4) Initial detection sensor	(5) Indication of specific type of platform the observation was made from	(6) Length of time observers maintained visual contact with marine mammal(s) (min)	(7) Sea state (Beaufort scale)	(8) Visibility (nm)	(9) Sound source in use at time of sighting (Y/N)	(10) Indication of whether animal is <200 yd, 200-500 yd, 500-1000 yd, 1000-2000 yd, or >2000yd	(11) Mitigation implementation – whether operation of sonar sensor was delayed, or sonar was powered down or shutdown, and how long the delay was; or whether navigation was changed or delayed	(12) If source in use is hull-mounted sonar, relative bearing of animal from ship and estimation of animal's motion relative to ship	(13) Observed behavior – Watchstanders shall report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s), and if any calves are present
No major training exercises were conducted in the MITT study area during this reporting period.												

nr=not reported; VIS=visual; ACO=acoustic; Y=yes; N=no; na=not applicable

(iii) Evaluation (based on data gathered during all exercises) of mitigation effectiveness

There were zero major training exercises conducted in the MITT Study Area during this reporting period.

Table 1-iii-1. MITT Study Area Major Training Exercises

MTE Type	Dates	# of Exercise Days	# of US Ships Involved (MFAS and non-MFAS)	# of Mitigation Sightings	# of Marine Mammals
No major training exercises were conducted in the MITT study area during this reporting period.					

MITT Study Area Major Training Exercise Marine Mammal Observations

There were zero major training exercises conducted in the MITT Study Area during this reporting period therefore there is no sighting data to report.

MITT Study Area Major Training Exercise Mitigations

There were zero major training exercises conducted in the MITT Study Area during this reporting period therefore there is no mitigation data to report.

SUMMARY: Mitigation Effectiveness and Navy Mitigation Zone Adherence

There were zero major training exercises conducted in the MITT Study Area this reporting period therefore there is nothing to report regarding mitigation effectiveness or mitigation zone adherence. The Protective Measures Assessment Protocol (PMAP) is required to be used prior to each activity requiring potential mitigation to ensure proper requirements and mitigation zones are utilized.

(iv) Exercise Information for each SINKEX

SINKEX events were not conducted in the MITT Study Area during this reporting period.

(2) MITT – Summary of Sources Used

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

This section summarizes total annual usage of each type of non-impulsive and impulsive source bin within MITT.

Table 2-i-1. Training and Testing source usage within the MITT Study Area by source bin.

Authorized sound sources 50 CFR §218.95		Authorized Amount (03Aug17-02Aug18)	Actual Usage (03Aug17-02Aug18)	% Used of Authorized Amount
(A) Annual Non-impulsive Sources Used During Training and Testing				
LF4		123 hours	*	*
LF5		11 hours	*	*
LF6		40 hours	*	*
MF1		1,872 hours	*	*
MF2		625 hours	*	*
MF3		192 hours	*	*
MF4		214 hours	*	*
MF5		2,588 items	*	*
MF6		33 items	*	*
MF8		123 hours	*	*
MF9		47 hours	*	*
MF10		231 hours	*	*
MF11		324 hours	*	*
MF12		656 hours	*	*
HF1		113 hours	*	*
HF4		1,060 hours	*	*
HF5		336 hours	*	*
HF6		1,173 items	*	*
ASW1		144 hours	*	*
ASW2		660 items	*	*
ASW3		3,935 hours	*	*
ASW4		32 items	*	*
TORP1		115 items	*	*
TORP2		62 items	*	*
M3		112 hours	*	*
SD1		2,341 hours	*	*
(B) Annual Number of Impulsive Source Detonations During Training and Testing				
E1	0.1 lb to 0.25 lb NEW	10,140 detonations	0	0%
E2	0.26 lb to 0.5 lb NEW	106 detonations	0	0%
E3	>0.5 lb to 2.5lb NEW	932 detonations	93	10%
E4	>2.5 lb to 5 lb NEW	420 detonations	7	2%
E5	>5 lb to 10 lb NEW	684 detonations	0	0%
E6	>10 lb to 20 lb NEW	76 detonations	3	4%
E8	>60 lb to 100 lb NEW	16 detonations	0	0%
E9	>100 lb to 250 lb NEW	4 detonations	3	75%
E10	>250 lb to 500 lb NEW	12 detonations	0	0%
E11	>500 lb to 650 lb NEW	6 detonations	0	0%
E12**	>650 lb to 1,000 lb NEW	184 detonations	49	27%

*Information is presented in the classified version of this report
**Bomb detonations (all NEWs) were modeled as E12 and totaled here

Table 2-i-2. 5-year cumulative source usage within the MITT Study Area by source bin.

Sound Source Bin	Year 1 Actual Usage (03Aug15-02Aug16)	Year 2 Actual Usage (03Aug16-02Aug17)	Year 3 Actual Usage (03Aug17-02Aug18)	5-yr Authorized Amount (03Aug15-02Aug20)	5-yr Cumulative Actual Usage (03Aug15-02Aug20)	% Used of 5-yr Authorized Amount
(A) Non-impulsive Sources Used During Training and Testing						
LF4	*	*	*	615 hours	*	*
LF5	*	*	*	55 hours	*	*
LF6	*	*	*	200 hours	*	*
MF1	*	*	*	9,360 hours	*	*
MF2	*	*	*	3,125 hours	*	*
MF3	*	*	*	960 hours	*	*
MF4	*	*	*	1,070 hours	*	*
MF5	*	*	*	12,940 items	*	*
MF6	*	*	*	165 items	*	*
MF8	*	*	*	615 hours	*	*
MF9	*	*	*	235 hours	*	*
MF10	*	*	*	1,155 hours	*	*
MF11	*	*	*	1,620 hours	*	*
MF12	*	*	*	3,280 hours	*	*
HF1	*	*	*	565 hours	*	*
HF4	*	*	*	5,300 hours	*	*
HF5	*	*	*	1,680 hours	*	*
HF6	*	*	*	5,865 items	*	*
ASW1	*	*	*	720 hours	*	*
ASW2	*	*	*	3,300 items	*	*
ASW3	*	*	*	19,675 hours	*	*
ASW4	*	*	*	160 items	*	*
TORP1	*	*	*	575 items	*	*
TORP2	*	*	*	310 items	*	*
M3	*	*	*	560 hours	*	*
SD1	*	*	*	11,705 hours	*	*
(B) Impulsive Source Detonations During Training and Testing						
E1	0	500	0	50,700 detonations	500	1%
E2	0	0	0	530 detonations	0	0%
E3	7	7	93	4,660 detonations	107	2%
E4	0	1	7	2,100 detonations	8	1%
E5	0	0	0	3,420 detonations	0	0%
E6	3	5	3	380 detonations	11	3%
E8	0	0	0	80 detonations	0	0%
E9	0	6	3	20 detonations	9	45%
E10	0	10	0	60 detonations	10	17%
E11	0	0	0	30 detonations	0	0%
E12**	0	1	49	920 detonations	50	5%

*Information is presented in the classified version of this report
**Bomb detonations (all NEWs) were modeled as E12 and totaled here

(2)(C) Improved Extended Echo-Ranging System (IEER) sonobuoy summary

IEER sonobuoys were not used within the MITT Study Area. IEER buoys have been phased out of the training inventory, and are no longer planned or anticipated to be used in MITT. However, they could possibly be used during testing activities in future years.

(3) MITT – Geographic Information Presentation

The precise locations and frequency of sonar use is classified. There is currently no method to declassify the sensitivity of this data in order to publish this type of information in an unclassified report. For this reason the only available method for this information to be disseminated for the foreseeable future is in the classified version of this report.