



DEPARTMENT OF THE NAVY

COMMANDER
UNITED STATES PACIFIC FLEET
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IN REPLY REFER TO:

5090

Ser N46/0847

October 25, 2023

Office Director, Office of Protected Resources
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
B-SSMC3, Room 13821
1315 East-West Highway
Silver Spring, MD 20910-3282

Dear Director:

On behalf of Commander, U.S. Pacific Fleet, enclosed is a printed copy of the unclassified Mariana Islands Training and Testing (MITT) Study Area Annual Training Report for the third year of the authorization (8 pages). The classified annex of this report will be delivered separately.

This report is submitted pursuant to the reporting requirements for the MITT Study Area Marine Mammal Protection Act authorization.

Please extend my thanks to your staff for their continued support of the U.S. Navy's compliance process. We are available to discuss with you or your staff should you have comments on the enclosed report or recommendations for future reports. My point of contact for these matters is Mr. Ben Kostenbader at 808-471-4683 or arnold.r.kostenbader.civ@us.navy.mil.

Sincerely,

A handwritten signature in cursive script, appearing to read "J. H. Beattie".

J. H. BEATTIE
Captain, U.S. Navy
Deputy Fleet Civil Engineer
By direction

Enclosure: 2023 Unclassified MITT Study Area Annual Training Report, Year 3

Prepared for and submitted to:

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 30 July 2020

UNCLASSIFIED
2023 Mariana Islands
Training & Testing (MITT) Study Area
Annual Training Report

31 July 2022 to 30 July 2023
Year 3

30 OCTOBER 2023

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MARIANA ISLANDS TRAINING AND TESTING STUDY AREA TRAINING REPORT

INTRODUCTION

The U.S. Navy prepared this Annual Training Report covering the period from 31 July 2022 to 30 July 2023 in compliance with the National Marine Fisheries Service (NMFS) Final Rule, Letter of Authorization (LOA), and Incidental Take Statements under the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) authorizations for the U.S. Navy's Mariana Islands Training and Testing (MITT) Study Area.

In the MITT Final Rule and Letter of Authorization,¹ the following report subsections were specified and are present within this report:

- (1) Major Training Exercises (MTEs)
 - (i) Exercise information for each MTE
 - (ii) Individual marine mammal sighting information for each sighting in each exercise where mitigation was implemented
 - (iii) Evaluation (based on data gathered during all MTEs) of the effectiveness of mitigation measures designed to minimize the received level to which marine mammals may be exposed
- (2) Sinking Exercises (SINKEXs)
 - (i) Exercise information gathered for each SINKEX
 - (ii) Individual marine mammal observation (by Navy Lookouts) information for each sighting where mitigation was implemented
- (3) Summary of Sources Used
 - (i) Total annual hours or quantity of each bin of sonar or other transducers
 - (ii) Total annual expended/detonated ordnance (missiles, bombs, sonobuoys, etc.) for each explosive bin
- (4) Marpi Reef and Chalan Kanoa Reef Geographic Mitigation Areas
- (5) Geographic Information Presentation
- (6) Sonar Exercise Notification

The information in this report represents the best practical data collection for this period.

The Biological Opinion² "Terms and Conditions" subsection states the Navy will monitor and report annual numbers of ordnance by type expended at Farallon de Medinilla (FDM). This information is present in this report in section (7).

¹MITT: 7(e) of the Letter of Authorization, and 50 CFR §218.95(e)(1) through (e)(6)

²MITT: 12.4(2)(b) of the Biological Opinion for the MITT Study Area (10 July 2020)

(1) MITT – Major Training Exercises (MTEs)

This section summarizes authorized sonar use and marine mammal observations from MTEs conducted within the MITT Study Area during the reporting period. The MITT MTEs include Large Integrated Anti-Submarine Warfare, which consists of *Joint Multi-Strike Group Exercise* (Valiant Shield), and Medium Integrated Anti-Submarine Warfare, which consists of *Joint Expeditionary Exercise*.

(i) Exercise information for each MTE

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

(A) Exercise designator	(B) Date began and ended	(C) Location	(D) Number and types of active sonar sources used	(E) Number and types of passive acoustic sources used	(F) Number and types of vessels, aircraft, and other platforms participating
			Surface hull-mounted sonar Submarine hull-mounted sonar Helicopter dipping sonar Aircraft sonobuoy Towed countermeasure	Surface hull-mounted sonar Submarine hull-mounted sonar Aircraft sonobuoy Towed array	CG DDG MH-60R dipping helo MPRA Submarines Non-ASW surface ship

No major training exercises were conducted in the MITT Study Area during the reporting period.

Table 1-1 (continued). MTEs conducted in the MITT Study Area

(A) Exercise designator	(B) Date began and ended	(C) Location	(G) Total hours of all active sonar source operation	(H) Total hours of each active sonar source bin	(I) Wave height (high, low, average)
				LF4 (hours) LF5 (hours) MFI (hours) MFIK (hours) MF3 (hours) MF4 (hours) MF5 (count) MF6 (count) MF9 (count) MFI1 (hours) MFI2 (hours) MFI12 (hours) MFI1 (hours) HFI1 (hours) HFI3 (hours) HFI4 (hours) HFI6 (hours) ASW1 (hours) ASW2 (count) ASW3 (hours) ASW4 (count) ASW5 (hours) TORP1 (count) TORP2 (count) TORP3 (count) FLS2 (hours) M3 (hours) SAS2 (hours) SAS4 (hours)	

No major training exercises were conducted in the MITT Study Area during the reporting period.

(ii) Individual marine mammal sighting information for each exercise where mitigation was implemented

Table 1-2. MITT MTE – Individual Marine Mammal and Sea Turtle Mitigation Sighting Information:

(A) Date/time/location of sighting	(B) Species	(C) Number of individuals	(D) Initial detection sensor	(E) Indication of specific type of platform observation was made from	(F) Length of time observers maintained visual contact with marine mammal (min)	(G) Sea state (Beaufort scale)	(H) Visibility (nm)	(I) Sound source in use at time of sighting (Y/N)	(J) Indication of whether animal was <200 yd, 200-500 yd, 500-1000 yd, 1000-2000 yd, or >2000 yd from sonar source	(K) Whether operation of sonar sensor was delayed, or sonar was powered or shut down, and how long the delay	(L) If source in use was hull-mounted, true bearing of animal from the vessel, true direction of vessel's travel, and estimation of animal's motion relative to vessel	(M) Lookouts must report, in plain language and without trying to categorize in any way, the observed behavior of the animal(s) and if any calves were present
No major training exercises were conducted in the MITT Study Area during the reporting period.												

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

There were no major training exercises conducted in the MITT Study Area during the reporting period.

Table 1-3. MITT Study Area Major Training Exercises.

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

MITT Study Area Major Training Exercise Marine Mammal Observations

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

MITT Study Area Major Training Exercise Mitigations

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

SUMMARY: Mitigation Effectiveness and Navy Mitigation Zone Adherence

The Lookout and mitigation zone measures approved by NMFS and outlined in the MITT Study Area LOA were effective in appropriately mitigating exposure of marine mammals to sonar. Although no MTEs nor active sonar mitigations took place in the MITT Study Area during the reporting period, the Protective Measures Assessment Protocol (PMAP) is directed to be used prior to each activity requiring potential mitigation to ensure proper requirements and mitigation zones are utilized. Fleet commanders, aircrews, and ship watch teams continue to improve individual awareness and enhance reporting practices. This improvement can be attributed to rigorous pre-event planning, mandatory Marine Species Awareness Training (including online training required for watch standing qualifications), adherence to required active sonar mitigation zones, and application of lessons learned in marine mammal sighting and reporting.

(2) MITT – Sinking Exercises (SINKEXs)

No SINKEX events took place in the MITT Study Area during the reporting period.

(3) MITT – Summary of Sources Used

This section summarizes total annual usage of each type of sound source used for training and testing within MITT from 31 July 2022 to 30 July 2023, which constitutes Year 3 of the 7-year authorization.

(i) Total annual hours or quantity of each bin of sonar or other transducers

Table 3-1. Annual Acoustic Source Usage within the MITT Study Area by Source Bin

Authorized sound sources from MITT Final Rule	Authorized Amount (31Jul22- 30Jul23)	Actual Usage (31Jul22- 30Jul23)	% Used of Authorized Amount
(i) Acoustic Sources Used During Annual Training and Testing			
<i>See classified annex for acoustic sources</i>			

(ii) Total annual expended/detonated ordnance for each explosive bin

Table 3-2. Annual Explosive Source Usage within the MITT Study Area by Source Bin

Authorized sound sources from MITT Final Rule	Authorized Amount (31Jul22- 30Jul23)	Actual Usage (31Jul22- 30Jul23)	% Used of Authorized Amount	
(ii) Explosive Sources Used During Annual Training and Testing				
E1	Medium-caliber projectile	768 detonations	0	0%
E2	Medium-caliber projectile	400 detonations	0	0%
E3	Large-caliber projectile	683 detonations	134	20%
E4	Mine neutralization charge	44 detonations	0	0%
E5	5-inch projectile	1,221 detonations	95	8%
E6	Hellfire missile	29 detonations	0	0%
E8	Maverick missile	134 detonations	7	5%
E9	500 lb. bomb	110 detonations	50	46%
E10	Harpoon missile / 1000 lb. bomb	78 detonations	11	14%
E11	650 lb. mine	5 detonations	0	0%
E12	2,000 lb. bomb	48 detonations	3	6%

Table 3-3. 7-year Cumulative Sound Source Usage within the MITT Study Area by Source Bin

Sound Source Bin	Year 1 Actual Usage (31Jul20 - 30Jul21)	Year 2 Actual Usage (31Jul21 - 30Jul22)	Year 3 Actual Usage (31Jul22 - 30Jul23)	7-yr Authorized Amount (31Jul20 - 30Jul27)	7-yr Cumulative Actual Usage (31Jul20 - 30Jul27)	% Used of 7-yr Authorized Amount
(i) Acoustic Sources Used During Annual Training and Testing						
<i>See classified annex for acoustic sources</i>						
(ii) Explosive Sources Used During Annual Training and Testing						
E1	768	383	0	5,376 detonations	1,151	21%
E2	184	0	0	2,800 detonations	184	7%
E3	35	51	134	4,591 detonations	220	5%
E4	0	0	0	308 detonations	0	0%
E5	135	45	95	8,547 detonations	275	3%
E6	5	12	0	203 detonations	17	8%
E8	98	31	7	932 detonations	136	15%
E9	94	72	50	770 detonations	216	28%
E10	12	52	11	546 detonations	75	14%
E11	0	0	0	17 detonations	0	0%
E12	12	0	3	336 detonations	15	4%

(4) MITT – Marpi Reef and Chalan Kanoa Reef Geographic Mitigation Areas

The amount of active sonar used in this area from December 1 to April 30 is presented in the classified annex to this report.

(5) MITT – Geographic Information Representation

The precise locations and frequency of ASW training 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 is in the classified annex of this report.

(6) MITT – Sonar Exercise Notification

The Navy submitted all required information to NMFS for all MTEs during the reporting period, including location of the exercise, beginning and end dates of the exercise, and type of exercise.

(7) MITT – Farallon de Medinilla (FDM) Ordnance Expenditures

In accordance with section 12.4 of the Biological Opinion, this section includes numbers of ordnance by type expended at FDM from 31 July 2022 to 30 July 2023.

Table 7-1. FDM Ordnance Expenditures by Sound Source Bin.

Sound Source Bin	FDM Ordnance Expenditures
E1	0
E2	0
E3	0
E4	0
E5	100
E6	0
E7	18
E8	1
E9	86
E10	13
E11	0
E12	19

There were two reported ricochets or misses that landed in waters surrounding FDM. As reported in the Navy’s 2023 FDM ESA Coral Reef Survey Report, during the 14-19 August 2022 survey, divers observed one fresh .50 caliber brass cartridge case (E0) and one inert bomb casing on the seafloor. No visual evidence of disturbance (e.g., craters, etc.) to the surrounding marine life was apparent.